

Bills Committee on Construction Industry Council (No. 2) Bill

Progress in Taking Forward Recommendations of the Construction Industry Review Committee

Purpose

This paper provides a summary of latest progress achieved by the Provisional Construction Industry Co-ordination Board (PCICB) in taking forward recommendations of the Construction Industry Review Committee (CIRC).

Background

2. In its report submitted to the Chief Executive in January 2001, CIRC outlined 109 recommendations aimed at uplifting both the quality and cost-effectiveness of local construction. To kick-start this major change process, PCICB was subsequently formed in September 2001 as a precursor of the statutory industry co-ordinating body to spearhead reform initiatives. Since then, progress reports have been submitted at regular intervals to Members of the Legislative Council and uploaded to the PCICB website at <http://www.pcicb.gov.hk> for public information.

Present Position

3. Over the past three years, PCICB has successfully emerged as a focal point to develop consensus on strategic issues and a reliable channel for the industry to communicate with Government. Operating through nine working groups and task forces, it has also made promising headway on a number of priority issues such as management of subcontracting, construction cost and research, construction site safety, employees' compensation insurance, construction waste as well as manpower training and development. Above all, overriding emphasis has been placed upon partnership, collaboration and proactive client involvement. A summary of progress achieved on different CIRC recommendations is at *Annex*.

4. With the passage of time and evolving circumstances, it has become increasingly important for PCICB to venture beyond confines of the CIRC report in response to prevailing aspirations. Establishment of the proposed Construction Industry Council vested with self-regulatory powers and independent source of funding is an essential step to take in realizing this new stage of the reform process.

Way Forward

5. The Government remains fully committed to assisting PCICB in exercising its role as the lead agent to rally support among stakeholders and in driving continuous quality improvement across the entire industry.

Environment, Transport and Works Bureau
November 2004

Present Position on CIRC Recommendations with Notable Progress

List of Abbreviations

Abbreviation	Meaning	Abbreviation	Meaning
AACSB	Architectural and Associated Consultants Selection Board	HKGBCA	Hong Kong General Building Contractors Association
AP	Authorized Person	HKIA	Hong Kong Institute of Architects
Arch SD	Architectural Services Department	HKIE	Hong Kong Institution of Engineers
BD	Buildings Department	HKIS	Hong Kong Institute of Surveyors
C&SD	Census and Statistics Department	HPLB	Housing, Planning and Lands Bureau
CDM	Construction (Design and Management)	HyD	Highways Department
CITA	Construction Industry Training Authority	ICAC	Independent Commission Against Corruption
DSD	Drainage Services Department	IWG	Inter-departmental Working Group on Environmentally Friendly and Innovative Buildings
EACSB	Engineering and Associated Consultants Selection Board	LD	Labour Department
EDLB	Economic Development and Labour Bureau	Lands D	Lands Department
EMB	Education and Manpower Bureau	LegCo	Legislative Council
EMSD	Electrical and Mechanical Services Department	OSHC	Occupational Safety and Health Council
EPD	Environmental Protection Department	PCICB	Provisional Construction Industry Co-ordination Board
ETWB	Environment, Transport and Works Bureau	Plan D	Planning Department
FSTB	Financial Services and the Treasury Bureau	REDA	Real Estate Developers Association of Hong Kong
HA	Housing Authority	RGBC	Registered General Building Contractor
HD	Housing Department	RSC	Registered Specialist Contractor
HKCA	Hong Kong Construction Association	RSE	Registered Structural Engineer
HKEMCA	Hong Kong Electrical and Mechanical Contractors' Association	VTC	Vocational Training Council
HKFI	Hong Kong Federation of Insurers		

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
1	Clients' better understanding of construction delivery process and their close involvement in project implementation	Clients, consultants and contractors Start immediately (Within 1 year for public works projects)	ETWB and HA have reviewed the project delivery procedures for public works and public housing projects and found that appropriate provisions have been made for client involvements. In January 2003, HA has streamlined its procedure-based quality management system to a result-oriented system in compliance with ISO 9001:2000, thereby providing more flexible guidance to project teams whilst upholding the essential quality requirements. All works departments have been in compliance with ISO 9001:2000 since December 2003 and will continue to review and streamline their project delivery process on a regular basis.
2	More integrated input from different disciplines at the outset of a project	All clients in collaboration with their project teams Start immediately	For public housing projects, design reviews are conducted to obtain integrated input from the various disciplines. HA has also tried out pilot projects on "feed-forward partnering approach" involving early management and maintenance inputs during design stage. For public works projects, Project Steering Committees are set up for all multi-disciplinary projects requiring direct design and construction input from more than one department.
3	Wider use of value management (VM) techniques in local construction	All clients, with public sector clients taking the lead Start immediately	For public housing projects, VM and value engineering techniques have been used on seven pilot projects and will be progressively extended to other projects. VM was introduced into public works projects in 1996 and has since been widely used by works departments. Enhanced VM procedures were promulgated in August 2002.

¹ The recommended implementing parties have been updated to reflect the re-organization of the policy bureaux resulting from the implementation of the Principal Officer Accountability System on 1 July 2002.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
4	Allowing sufficient time for consideration of all relevant factors at project outset and mobilization of resources	All clients Start immediately	Appropriate procedures are in place to ensure adequate time for project planning and mobilization of resources. For public housing projects, the measures introduced include extending the construction period of piling and building contracts by 3 months as well as deploying additional staff to strengthen site supervision. For public works projects, ETWB has reviewed and found that the present procedures are satisfactory. Project implementation schedules are reviewed at appropriate stages, particularly when they are upgraded in the Public Works Programme.
5	Considering if there are practical means to address the effect of high land cost on construction quality	HPLB Within 3 years	Both the Land Sub-Committee of the Land and Building Advisory Committee and PCICB have agreed that high land cost was not a cause of the problems on construction quality. The current practice of disposing land at market price should continue.
6	Clear allocation of responsibilities in legislation, imposing appropriate statutory sanctions, and promotion of self-regulations	Government departments with regulatory authority over the construction industry Within 5 years (Within 2-3 years for private building projects)	Government is pursuing this recommendation on various fronts such as registration of geotechnical engineers under the Buildings Ordinance introduced in December 2004 re-engineering of the building plan approval process to enhance self-regulation by registered building professionals, and strengthened enforcement action by LD against subcontractors and owners of plants/equipment.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
7	Appropriate allocation of responsibilities among project participants and clear accountability structure in client organizations	Clients Start immediately	For public housing projects, HA has rationalized the project management setup including allocation of resources, responsibility and accountability. For public works projects, ETWB adopts the Project Management Approach whereby a project manager may determine the composition of his team and the roles/responsibilities of individual members. For private building projects, BD has set up a new supervision system to make AP/RSE and their staff accountable for the quality of works, particularly those relating to foundations.
9(a)	Voluntary subcontractor registration scheme (VSRS)	Industry co-ordinating body in consultation with stakeholders and Government departments Within 3 years	PCICB has successfully launched the Primary Register in November 2003 and received about 2,200 applications by mid-November 2004.
10	Provide training to enhance the skills and competence of subcontractors	Industry co-ordinating body and training institutions Start within 1 year	CITA is offering training courses to the managerial and site supervisory staff engaged by subcontractors. PCICB will consider improvements to these courses in planning the second phase of VSRS.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
11(a)	Prohibition of total subletting and tighter control over the performance and management of subcontractors	Clients and contractors Start immediately	HA has limited subcontracting to one layer for piling contracts and required compulsory engagement of subcontractors registered under VSRS since 1 April 2004. ETWB has rendered it an obligation for main contractors to prohibit total subletting by their subcontractors and to deploy their own staff for supervision and management. Contractual requirement to employ subcontractors registered under the VSRS have also been incorporated into all tenders issued since 15 August 2004. For private building projects, BD has introduced site supervision plans, backed up by disciplinary sanctions, to ensure that RGBC and RSC will not derogate from their responsibilities as a result of subcontracting.
11(b)	Control of subcontractors working on public works projects	ETWB and the works departments Start immediately	ETWB has imposed a tender requirement for main contractors to submit subcontractor management plans (SMP) outlining details on the selection and performance monitoring of subcontractors, as well as the control over further subletting. Contractors are required to update their SMPs regularly during the actual execution of works. Outcome of a review on the effectiveness of SMPs will be presented to PCICB in early-2005.
11(c)	Control of subcontracting by HA in other types of construction works in addition to piling	HA Within 1 years	HA has required building contractors to submit details on the first layer of sub-contractors and Contractors' Supervision Plan in three pilot projects setting out proposals for supervising subcontractors and training of workers.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
12	Raising the performance standards of subcontractors by providing a conducive environment	HKCA, HKEMCA and individual contractors Start immediately	To raise the performance standard of subcontractors, PCICB promulgated in March 2003 a set of Guidelines on Subcontracting Practice. It has also formed a sub-group to draw up guidelines on standard forms of domestic subcontract for promulgation in early-2005.
13(a)	Adequate supervisory provision for critical stages of construction	Clients and project teams Start within 1 year	As an on-going effort to strengthen site supervision for public housing projects, HA has deployed resident engineers to all piling contracts and resident professionals to complex building contracts on a need basis. For public works projects, ETWB has reviewed the current requirements on staffing levels for site supervision and found them adequate.
13(b)	Quality supervision requirements for superstructure works in private building projects	BD Completed in mid-2001	BD has introduced a new system with expanded scope for auditing the quality of superstructure works.
13(c)	Structured site supervision systems for public works and public housing projects	HA, ETWB and works departments Within 1 year	HA and ETWB will improve their established site supervision systems continuously.
14	Rigorous enforcement of acceptance standards, designation of site supervision as tender evaluation criterion, and demonstration of satisfactory discharge of site supervisory role by consultants	Clients Start immediately (Within 1 year for public works projects)	Procedures are in place to rigorously enforce acceptance standards in public works and public housing projects. Site supervision capability is one of the criteria for consultant selection, whilst site supervision is taken into account in assessing contractors' performance and tender evaluation. For private building projects, BD will continue to conduct site auditing and strengthen site supervision requirements for complex building works.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
15	Streamlining of bureaucratic procedures in site supervision systems	Clients, consultants and contractors Start within 1 year (Within 1 year for public works projects)	ETWB and HA are streamlining paperwork on an on-going basis through restructuring of site records, customization of site supervision procedures to suit project requirements and electronic document management systems.
16	Independent technical audits and sanction of malpractices	Clients and project teams Start within 1 year (Within 1 year for public works projects)	For public housing projects, HA has established comprehensive internal audit systems conducted by independent audit units. For public works projects, audit systems are in place to prevent sub-standard works and assure construction quality. ETWB has reviewed and enhanced these systems in the first six months of 2002.
17	Review of findings of audit teams by ETWB and works departments	ETWB Start within 1 year (Within 1 year for public works projects)	ETWB has incorporated requirements to review audit findings into the project delivery procedures.
18	Bringing public housing projects within the ambit of the Buildings Ordinance and independent auditing on quality standards of public housing	Government and HA Ongoing action	The Government is still assessing the legal, administrative, staffing and financial implications of various options for application of the Buildings Ordinance. In the meantime, an Independent Checking Unit established in HD continues to institute third-party checking over all new buildings and demolition projects of HA to ensure compliance with technical standards prescribed under the Ordinance.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
19	Improving arrangements for quality control tests	Clients and project teams Start immediately (Within 1 year for public works projects)	HA has implemented several measures to improve quality control tests in public housing projects, including an extended policing role played by its own laboratory and enhancing the security of test samples. ETWB has reviewed the system of conducting quality control tests and rolled out improvements in May 2002.
21	Review of HA's new arrangements for consultant selection	HA Ongoing action	The enhanced two-envelope system for selection of consultants that places greater weight on the quality of submissions has been effective in promoting healthy competition based on both price and quality. HA will fine-tune the system in light of experience and prevailing needs.
22	Review of listing criteria and shortlisting arrangements for AACSB consultancies	FSTB, ETWB and Arch SD Within 2 year	A new mechanism to categorize/shortlist architectural and associated consultants has been put into effect since September 2002.
23	Reflecting quality aspects in marking schemes for public works consultancies, past performance as criterion for prequalification and bid assessment, and quantitative means for measuring the past performance of consultants	FSTB, ETWB, AACSB and EACSB Within 2 years	In December 2001, ETWB promulgated procedures to include past performance as a criterion for selection of consultants, to reflect in performance assessment any failures in adhering to staffing proposals leading to adverse impacts on quality of services, and to adopt marking schemes reflecting all quality aspects in assessing technical submissions. The consultants' performance index system was rolled out in July 2002 and has been used since mid-September 2003 in consultant selection exercises.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
24	Listing, tendering practices and performance appraisal system of HA's contractors	HA Ongoing action	HA is making continuous improvements including establishment and review of the Premier League of Contractors, using preferential tender award system for building and building services works, differentiating 'wildcard' with doubtful capacity and excluding exceptionally low bids. Pilot projects adopting enhanced Preferential Tender Award System have been launched with marking scheme that gives due recognition to technical performance on top of price.
25(a)	Improving contractor selection system for public works projects	FSTB and ETWB Within 1 year	To place greater emphasis on past performance and quality in selecting public works contractors, the use of marking scheme for tender evaluation has become mandatory since 1 November 2002. Normal contracts adopt a simplified marking scheme whereby compliant tenders that achieve the highest scores based on price and past performance will be recommended for acceptance. Full-blown marking schemes that take account of both past performance and quality are used for cases involving high contract sums and strenuous technical requirements.
25(b)	Allowing only contractors with consistently good performance to take part in pre-qualification exercise for major public works projects.	FSTB and ETWB Within 3 years	With the mandatory use of marking schemes, prequalification of tenderers is no longer necessary and should only be conducted under special circumstances with justifications.
26	Review of Performance Assessment Scoring System 2000 for HA's contractors	HA Ongoing action	An enhanced system with increased objectivity and impartiality was launched for building and building services works in early-2002. Following collection of feedback one year after implementation, the system was fine-tuned in October 2003.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
27(a)	Transparency of performance assessment arrangements for consultants and contractors for public works projects	ETWB and works departments Within 2 years	ETWB has provided consultants and contractors with their full performance appraisal reports since January 2002 and June 2002 respectively.
27(b)	Providing the industry regularly with benchmark scores for Public Works Contractors' Performance Index System	ETWB Within 3 years	With effect from 1 November 2002, ETWB has been advising public works contractors on a quarterly basis their scores under the contractors' performance index system and benchmark scores (i.e. maxima, minima, averages and medians) for the various approved lists.
28	Objectivity of the performance assessment system for consultants and contractors for public works projects	ETWB and works departments Within 2 years	For consultants, ETWB has introduced since January 2002 a number of measures including reduced reporting interval from six to three months, panel review to ensure consistency and objectivity of performance assessment, disciplinary actions against poor performance and procedures for appeal. An appeal mechanism has been in place for contractors since April 2002 and is complemented by clearer guidelines and workshops on performance appraisal.
29	Debriefing to unsuccessful bidders and making known quality scores of winning bids	All clients, with public sector clients taking the lead Within 2 years	For public works projects, the procedures on debriefing have taken effect in February 2003. For public housing projects involving technical submissions, HA makes known the scoring to tenderers upon award of contracts.
30	Post-completion reviews with consultants and contractors	Public sector clients Within 2 years	HA has made use of close-out partnering meeting for experience sharing and is adopting post-completion review workshops for new capital projects. The procedures for post-completion review on major public works contracts and consultancies were rolled out by ETWB in September 2003.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
31(a)	Sharing information among public sector clients on the performance of consultants and contractors	Public sector clients Within 1 year	Arrangements are in place for ETWB, BD and HA to share information on the performance of contractors, whilst information on the performance of consultants is only being shared between ETWB and HA. Cases involving other public sector clients will be handled on a need basis.
31(b)	Disciplinary actions under the Buildings Ordinance against RGBC and RSC for poor performance in public sector projects	BD Within 1 year	The mechanism for referring disciplinary cases from HA and ETWB to BD has been in operation since April 2002.
32(a)	Promoting systematic risk management	Public sector clients Within 2 years	For public housing projects, HA has examined the practices of major clients and conducted a study on parent company guarantee as well as other risk management tools including on-demand bond. A set of internal guidelines on holistic risk management has been developed. For public works projects, ETWB is preparing a set of guidelines on systematic risk management for promulgation within 2004.
32(b)	Developing guidance notes on risk management.	Professional institutions and client organizations Within 2 years	See item 32(a).
33	Clients to be prepared to reject exceptionally low bids	All client organizations Start immediately	ETWB has promulgated in February 2003 broad guidelines to identify and deal with exceptionally low bids submitted for public works contracts and consultancies. Exceptionally low bids will be rejected by HA if there is inexplicable doubt on the bidder's capability to deliver in accordance with the tender requirements.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
34	Exercising robust change control and promulgation of change control procedures	All client organizations Start immediately (Within 1 year for public works projects)	ETWB and HA have put in place comprehensive change control procedures to manage changes in scope, budget, programme, design and specification of public works and public housing projects.
35	Reconsidering recommendations of the consultancy study on the General Conditions of Contract for public works projects	ETWB in consultation with the industry Within 1 year	On unforeseen ground conditions, ETWB has issued special conditions of contract for trial use in four projects while for third party lawful interference, Government will bear time delay but contractors will absorb financial losses if the third party in question is not its agent. Furthermore, ETWB introduced in July 2004 provisions to compensate contractors for any additional costs and delays resulting from changes in construction-related legislation during the contract periods.
36	Reviewing the Standard Form of Building Contract, Private Edition	Industry co-ordinating body in consultation with concerned stakeholders Within 2 years	The revised Standard Form of Building Contract – Private Edition will be ready for promulgation in early-2005.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
37(a)	Adopting proactive approach in resolving claims and disputes and training of project team on dispute resolution	All client organizations, consultants and contractors Start immediately (Within 1 year for public works projects)	Detailed guidelines, rules and contract conditions on the adoption of dispute resolution advisors (DRA) and voluntary adjudication in public works contracts were issued in August 2004. Projects will be selected to try out these measures before full implementation. HA has adopted the use of DRA for all building and foundation contracts with tenders issued since April 2004. A high-level steering committee has also been formed in May 2003 to speed up dispute resolution.
37(b)	Contractual provisions for proactive and collaborative dispute resolution methods	All client organizations, consultants and contractors Start immediately (Within 1 year for public works projects)	See item 37(a).
38	Wider adoption of a partnering approach	All stakeholders Within 1 year	Partnering workshops are conducted at the start of all new public housing projects as a means to enhance mutual understanding and communication. So far, over 30 public works contracts have adopted non-contractual partnering and a forum to consolidate the experience acquired was held on 16 November 2004.
39	Considering integration of a partnering approach into a new form of contract	Major clients in consultation with stakeholders Start within 2 years	ETWB is exploring the adoption of contractual partnering based on the New Engineering Contract (NEC) developed in UK and is identifying suitable trial projects.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
40	Project pact jointly developed by client and project team	Clients and all stakeholders Start immediately	Partnering charters are developed by HA for individual capital projects as a committed framework for common values and expectations amongst project teams, consultants and contractors. ETWB has issued sample project pacts for optional adoption to secure teamwork, good practice and commitment from project participants.
41	Milestone payments	ETWB and other major clients Within 3 years	Milestone payment has been used in major public works projects since the 1990's and additional guidelines will be promulgated in early-2005 to promote its wider adoption. For public housing projects, HA has reviewed the effectiveness of milestone payment and concluded that it is only suitable for design-and-build contracts.
42	Considering the merits and need of enacting security of payment legislation	ETWB Within 3 years	ETWB has reviewed overseas experience in adopting security of payment legislation and will consult the PCICB on the way forward in early-2005. Meanwhile, PCICB has formed a sub-group to formulate guidelines on standard forms of subcontract embodying fair payment terms.
43	Improvement of the security of project payments to parties engaged by them	Clients and other paying parties Start immediately	Payment arrangements adopted in public housing and public works projects are in line with the CIRC recommendation. ETWB has updated its project administration handbook to propagate good payment practices.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
44	Considering wider adoption of alternative procurement approaches such as target cost contracting	Major clients Within 5 years	ETWB promulgated in October 2004 guidelines on selection of procurement route for public works projects. On public housing projects, HA is finalizing the tender procedures and contractual arrangements for piloting on procurement approaches modeled on the “Open Book: Guaranteed Maximum Price” option.
45	Review of the curricula of construction-related courses and provision of more opportunities for site experience	Relevant tertiary institutions, professional institutions and industry bodies Within 3 years	PCICB has reviewed in conjunction with the Hong Kong Polytechnic University and the City University of Hong Kong their construction-related courses with a view to securing a steady supply of practical training places from the industry.
46(a)	Encouraging teaching staff of local tertiary institutions to acquire industry experience	Relevant tertiary institutions Within 3 years	To facilitate experience sharing, the tertiary institutions are engaging construction practitioners as part-time lecturers, mentors or reviewers to supervise projects carried out by their students. Furthermore, all teaching staff are required to attain a prescribed level of academic and professional qualifications.
46(b)	Involvement of construction professional in teaching of undergraduate and postgraduate courses	Relevant tertiary institutions and industry co-ordinating body Within 3 years	See item 46(a).
47	Mandatory participation in Continuing Professional Development (CPD) activities	Professional institutions Within 2 years	HKIA and HKIS have already made CPD mandatory for their members since January 2003, whilst HKIE will seek approval from its Council to do so from June 2005.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
48	Drawing up structured training framework and improve on the curricula of diploma courses for site supervisors	Industry co-ordinating body, relevant training institutions and other concerned stakeholders Within 2 years	CITA will collaborate with the academia to enrich its training programmes, whilst VTC is planning to upgrade its diploma courses with streaming for different disciplines and an element of compulsory practical training.
49	Introduction of a new class of membership for site supervisors	Professional institutions and other concerned industry bodies Within 2 years	HKIA has provided a new affiliates membership for site supervisory personnel and technicians.
51	Introduction of a new class of membership for technicians	Professional institutions Within 2 years	HKIS has provided a new grade of membership for technicians.
52	Construction workers registration scheme	ETWB As soon as possible	The Construction Workers Registration Authority was established in September 2004 to prepare for launching of the registration system.
53	Contractual requirement to employ specified percentages of trade-tested workers and to increase such percentages over time	ETWB and HA Ongoing action	For public works projects, the requirement to engage trade-tested workers has been extended to 13 additional trades and the minimum percentages have been increased to 50% in 14 trades since January 2003. For public housing projects, HA has extended the requirement to 28 trades, 22 of which require 80% of trade-tested workers or more (including 17 requiring 100%).
54	Review of basic craft courses offered by CITA	CITA and EMB Within 1 year	The revamped basic craft courses were offered by CITA in the 2002-03 academic year.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
55	Revamp of the apprenticeship scheme for the construction industry	ETWB, EMB, industry co-ordinating body, VTC and CITA Within 2 years	A review of the apprenticeship scheme was completed and changes to improve its efficiency and effectiveness will be made in due course.
56(a)	Encouraging multi-skill development for construction workers	Industry co-ordinating body, employers and training institutions Within 2 years	CITA has taken various measures to encourage multi-skill development including prizes for passing multiple trade tests, discounted fees for taking multiple trade tests, expanded contents of full-time short courses and extended scope/duration of basic craft courses. PCICB is exploring other improvements on basic skills training and consolidation of trade classifications.
56(b)	Developing a craft skill qualification framework to provide career path for tradesman	Industry co-ordinating body, EMB and CITA Within 2 years	PCICB has indicated support in principle for the introduction of master craftsman as a higher qualification in selected trades.
57	Review of the composition of the CITA Board.	EMB, industry co-ordinating body and CITA Within 1 year	A revised composition of the CITA Board was approved by LegCo in February 2004. Appointments were made upon commencement of the new legislation on 1 June 2004.
58(a)	Fostering ethical culture - ICAC's efforts in rigorous enforcement and corruption prevention education	ICAC Ongoing action	ICAC will sustain its rigorous enforcement actions and corruption prevention education. To this end, case study materials in the form of VCDs have been distributed to relevant government departments, consultants, contractors, and tertiary institutions.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
58(b)	Fostering ethical culture – Guidelines on prohibitions against acceptance of advantages and excessive entertainment	ETWB and ICAC in collaboration with industry Within 1 year	Based on the sample provided by ICAC, HA and ETWB have prepared guidelines on appropriate behaviour and issued them to site staff working on public works and public housing projects. For private building projects, BD has issued similar guidelines to RGBCs and RSCs.
58(c)	Fostering ethical culture – Probity pledge by consultants and contractors, probity training for their staff, and promulgation of company codes of conduct	Public sector clients and ICAC Within 1 year	ETWB and HA have issued sample code of ethics prepared by ICAC to encourage consultants and contractors to issue their own company codes of conduct. HA has coordinated with ICAC to provide a series of on-site induction and refresher training on integrity. Furthermore, ETWB promulgated in January 2004 special conditions on ethical commitment for incorporation into public works contracts and consultancy agreements.
58(e)	Fostering ethical culture – Making professional ethics a compulsory subject in construction-related courses	ICAC, tertiary institutions and other construction training institutions Within 1 year	CITA and VTC have included professional ethics in their supervision and management courses, whilst five local universities have agreed to incorporate an element of professional ethics in their construction-related courses. ICAC organized a seminar in November 2003 to assist university lecturers in conducting ethics training.
58(f)	Fostering ethical culture – Enhancing training on professional ethics for practitioners	ICAC and construction training institutions Within 1 year	ICAC has forged a close partnership with professional bodies such as HKIA, HKIE and HKIS by developing ethics training for their CPD programmes.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
59	Improving methodology for collating and compiling construction manpower statistics	EMB, ETWB and other concerned parties Within 2 years	Trial run of the Labour Market Analysis project developed by VTC to improve the methodology for manpower analysis is scheduled for completion in late-2004. Separately, ETWB introduced in May 2003 updated multipliers to forecast construction manpower demand generated by public works projects.
60	Wider use of direct labour	Client organizations Within 2 years	ETWB has launched a trial scheme on the long-term employment of construction workers whose findings were presented to the PCICB Working Group on Management of Subcontracting in November 2004. For public housing projects, main building contractors are required to employ site agents, general foremen and block foremen on monthly wage basis. Contractors for three pilot contracts are also testing out the use of direct labour for selected trades including leveler and plasterer.
61	Better integration in the delivery of construction projects through wider adoption of alternative procurement approaches such as design and build and prime contracting	Client organizations, industry co-ordinating body, tertiary institutions, professional institutions and training institutions Start within 2 years	Between 1997 and 2003, 18 public works contracts costing \$15.7 billion were executed by way of the design and build method, and another eight contracts costing \$2.8 billion are still underway. ETWB promulgated guidelines on selection of procurement route for public works in October 2004. On public housing, HA is examining the feasibility of launching a pilot "Design, Build, Operate and Transfer" project.
62	Wider use of standardized and modular components	Public sector clients with other industry stakeholders Start within 2 years	Standardized and modular components are used extensively in public housing projects. ETWB launched in December 2002 a database on its website to disseminate information on standard components and practices developed by various government departments.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
63	Standardization and rationalization of construction processes and practices	Client organizations and other stakeholders Within 3 years	For public housing projects, standardization and rationalization of the construction process are undertaken by HA in conjunction with the incremental review of its specification library. HA has recently updated relevant sections of its specification to align with local construction processes and practices as well as the specification requirements of other government departments.
64	Central construction standardization body (CCSB)	ETWB and industry co-ordinating body Within 3 years	A consultancy study on setting up of the CCSB was completed in 2000 and its financial viability was further investigated in 2001. PCICB has decided to set up in due course a working group to explore the way forward.
65	Wider use of prefabrication and other buildability measures	Public sector clients, industry co-ordinating body in collaboration with other stakeholders Start within 2 years	For private building projects, BD issued a Joint Practice Note in February 2002 to promote the use of non-structural prefabricated external walls through exemptions from gross floor area and/or site coverage calculations. This was followed by a code of practice on the design, construction and quality control of precast concrete construction in November 2003. For public housing projects, HA has adopted prefabrication techniques since mid-1980's and will actively explore opportunities for expanding the scope of precasting, including innovating on the use of precast structural walls and 3-D precasting through a pilot project. For public works projects, ETWB has launched a database in its website for promoting wider use of standardized components and practices.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
66	Raising information technology (IT) literacy of the construction industry	Industry stakeholders, professional institutions, tertiary institutions and training institutions Start within 1 year	Works departments have included training in their departmental IT plans since 2002/03. The electronic tendering of public works contracts using CD-ROM will also help to promote IT adoption and literacy. Prompted by PCICB, CITA and VTC have gauged industry feedback and will refine their IT training courses to keep pace with latest developments.
67	Wider adoption of IT	Major clients and key stakeholders Start immediately	ETWB is rolling out electronic procurement in stages, starting off with dissemination of tender documents on removable media or through the Internet and submission of tender returns on removable media. A survey to gauge the views of industry stakeholders on electronic tendering was carried out in January 2004. For public housing projects, HA has piloted on the use of intranet, site surveillance and mobile computing to improve information sharing and site supervision.
68	Feasibility of electronic checking of building plans	BD Ongoing action	BD will keep in view technological developments and computer software to support electronic checking of building plans. Authorized Persons have been requested to make both paper and electronic submissions whenever computer software is used for calculating floor areas and volume of buildings.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
69	Common platform for electronic communications within the local construction industry	ETWB and concerned regulatory authorities As soon as possible	EMSD is setting up internal systems to facilitate electronic submissions and will withdraw exemptions for the last two ordinances in mid-2005. A unified standard of computer-aided drafting for public works projects was promulgated in September 2002 and a consultancy for developing the Works Project Information Standard will be commissioned in mid-2005.
70	Priority areas for software development	ETWB, industry co-ordinating body, academia and other industry stakeholders Start within 1 year	ETWB completed the study on electronic services delivery of works projects in June 2002 and identified information standards, communication platforms and enabling services as the priority areas for software development.
71	Committing adequate resources on research beneficial to corporate and project objectives of public sector clients	Public sector clients and progressive private sector clients Start within 2 years	A total of 13 research projects costing over \$14 million undertaken by the academia and other industry organizations commissioned under the HA Research Fund are expected to be completed by late-2005. For public works projects, an action plan was issued to provide guidance on preparation/ updating of the three-year departmental plan of research activities.
72	Financing construction search through Innovation and Technology Fund	ETWB, Innovation and Technology Commission, industry co-ordinating body and research bodies Start within 1 year	The PCICB Task Force on Construction Research and Development will continue to explore the scope for greater use of the Innovation and Technology Fund.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
73	Better collaboration on construction-related research and development (R&D)	ETWB, industry co-ordinating body and research bodies Start within 1 year	The Task Force on Construction on Construction Research and Development set up under PCICB is devising a mechanism to improve co-ordination and collaboration of research activities in future.
74	Comprehensive review of the Buildings Ordinance	HPLB, BD, Lands D and Plan D Within 1 year	The Buildings (Amendment) Ordinance 2004 incorporating relevant recommendations of the first stage of the review was enacted in July 2004 and is scheduled to come into operation in December 2004.
75(a)	Building plan processing – BD to assume the lead role in resolving conflicting requirements among public authorities	Government Within 2 years	BD has assumed a leading role in co-ordinating the requirements of public authorities, and has taken steps to re-engineer the building plan checking process to improve efficiency and quality of service.
75(b)	Building plan processing - Pledge on time limit for tendering advice by government departments	Concerned Government departments Within 1 year	All concerned departments have pledged time limits for giving comments.
76	Codes and guidelines on legislative requirements	All regulatory authorities Ongoing action	Codes of practice and guidelines for statutory provisions are issued on an on-going basis. Some examples include practice notes for the Buildings Ordinance and regulations, codes of practice and guidelines for legislation relating to electrical and mechanical installations, environment, occupational health and safety. These codes are supplemented by seminars and specific advice on selected topics.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
77(a)	Facilitating access to information on existing and proposed underground utilities	HyD (lead) Start within 2 years	The Electronic Mark Plant Circulation (EMPC) Stage 1 System is performing effectively and in August 2004 more utility undertakers have been invited to join this system. The Electronic Mark Plant Query System operated by the University of Hong Kong has ceased operation.
77(b)	Improving accuracy of as-built records of underground utilities	HyD (lead) Start within 2 years	The guideline for the practice and accuracy standard of as-built records of underground utilities has been implemented after endorsement by the Joint Utilities Policy Group in August 2002. A review of the guideline was completed in April 2004.
77(c)	Streamlining the processing of road excavation permits	HyD (lead) Within 2 years	The Internet interface for HyD's Utility Management System became operational in September 2002. Streamlined procedures for applying excavation permits were rolled out to the whole territory in early-2003. A standing Committee on Implementation of the Land (Miscellaneous Provisions) (Amendment) Ordinance has taken up regular monitoring and review of the streamlined procedures since January 2004.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
78	Promoting competition in prices of ready-mixed concrete (RMC)	ETWB, HA, concerned industry stakeholders and the ready-mixed concrete industry Within 1 year	ETWB has issued a technical circular in December 2002 to facilitate the setting up of RMC batching plants for public works contracts. Competition has also been promoted by halving the average processing time for licences under the Air Pollution Control Ordinance from two to one month and facilitating subdivision of land for batching plants into smaller parcels. On public housing projects, the relevant contract specifications have been modified to allow greater flexibility for the adoption of site batching plant. Meanwhile, the average price of RMC had dropped from \$660/m ³ in 1997/98 to about \$400/m ³ by mid-2004.
79	Promotion of Hong Kong's construction services in other markets	ETWB, TDC, industry stakeholders and other relevant professional sectors Within 2 years	ETWB and the Chongqing Municipal Construction Commission signed a "Co-operation Agreement on Construction and Related Engineering Services" in Hong Kong on 19 October 2004. Reciprocity agreements on mutual recognition of professional qualifications with the mainland are in place for estate surveyors and architects, whilst the agreement for structural engineers has been signed in August 2004.
80	Reviewing the methodology for collating construction safety statistics	LD and C&SD Within 1 year	LD has consulted PCICB on a revised methodology to calculate the site accident rate and will fine-tune it to cover all employees working on site.
81	Review of the need for introducing legislation similar to the UK's CDM Regulations	LD in consultation with stakeholders Within 5 years	Some underlying principles of UK's CDM Regulations have been applied to pilot public sector projects. LD will keep a close watch on the outcome and gather relevant overseas experience before consulting industry stakeholders on the way forward.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
82	Incorporating practicable features of the UK's CDM Regulations in public works and public housing projects	ETWB and HA Within 2 years	Guidelines on adopting practical CDM features in public works and public housing projects will be ready in early-2005. Government will launch more pilot projects prior to full implementation.
84	Integration of site safety into the responsibilities of line managers	Clients and contractors Within 1 year	For public works projects, the safety responsibilities of all staff from managerial down to working level have been spelled out more clearly in the Construction Site Safety and Environmental Manual since mid-2004. For public housing projects, HA encourages line managers and site supervisors to embrace site safety as their overall management responsibilities through giving credits and recognition.
85(b)	Safety training and promotion – Site safety training for line managers and site supervisors	Clients, contractors, relevant training institutions Within 1 year	ETWB provides suitable safety training to its own line managers and site supervisory staff. Public works contracts also spell out requirements for the employment of line managers and supervisory staff with suitable safety training and qualifications. HA has fulfilled the same purpose by way of incentives available under its Performance Assessment Scoring System.
85(c)	Safety training and promotion– Construction safety training for general safety officers	LD and contractors Within 1 year	CITA offers refresher courses to provide general safety officers with construction safety training and OSHC will organize similar courses subject to demand. LD has written to major contractor trade associations encouraging the safety officers employed by their members to attend these courses.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
85(d)	Safety training and promotion – In-house site-specific safety briefing by contractors and subcontractors	LD to provide necessary training framework with the assistance of CITA and OSHC. Major clients to lead by stipulating site-specific safety training as a contractual requirement Start within 1 year	For public works contracts, site-specific induction briefings and toolbox training are conducted at six-monthly and bi-weekly intervals respectively. Site safety cycle was introduced by ETWB in mid-2002 prescribing safety activities conducted at daily, weekly and monthly intervals. Safety induction briefings are also required for public housing contracts, and the safe working cycle was introduced in October 2003.
85(e)	Safety training and promotion – Enhancing green card safety training for construction workers	LD with the assistance of CITA, OSHC and other relevant training bodies Within 1 year	CITA has included hands-on safety training in their green card courses and introduced an Advanced Safety Training Course for workers engaged in seven risk-prone trades. Both CITA and VTC have incorporated safety elements into their trade testing programmes.
86	Driving improvements in safety performance through procurement and contractual arrangements	Major clients Within 1 year	ETWB and HA have implemented a series of measures including the Pay for Safety Scheme, inclusion of safety plans in tenders, site safety cycles and suspension from tendering for repeated poor safety performance. Contractors tendering for or undertaking public housing works are awarded either credit or bonus for good safety performance, whilst enhanced specifications for site cleanliness/tidiness were introduced by ETWB in 2002. PCICB is assisting in rolling out some of these measures to the private sector.
87	Feasibility of developing incentive schemes for construction insurance policies to encourage better safety performance	LD Within 2 years	PCICB has collaborated with HKFI to launch a rebate scheme whereby an amount within the total insurance premium is reserved for reimbursement to contractors upon meeting a number of indicators on safety measures and claims experience.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
88(a)	Enhanced enforcement – Enforcement action against sites with unacceptably high accident records	LD Ongoing action	LD has put in place effective methods for identifying and dealing with construction firms with poor performance records, including close monitoring of their safety performance and conviction records, approaching their senior management to review the causes of safety problems and territory-wide blitz operations.
88(b)	Enhanced enforcement – Statutory provision for prosecution against subcontractors for non-compliance with safety requirements	EDLB and LD Within 2 years, allowing time for the legislative process	Amendments to the Construction Sites (Safety) Regulations and three other related regulations for holding both main contractors and subcontractors jointly liable for non-compliance with safety requirements were approved by LegCo in November 2003.
88(c)	Enhanced enforcement – Co-operation of contractors and subcontractors in enforcement actions against workers for non-compliance with statutory site safety requirements	LD, contractors and subcontractors Start immediately	LD has secured support from HKCA and the labour unions to take action against those workers who contravened statutory site safety requirements. Blitz operations are launched regularly to prosecute workers who fail to comply with these requirements.
88(d)	Enhanced enforcement – Disciplinary action against RGBC and RSC for blatant negligence on site safety	BD Start immediately	RGBC and RSC are liable to disciplinary actions for material deviations from the site safety supervision plans. BD has also introduced a penalty point system for initiating disciplinary actions against RGBC's and RSC's for site safety convictions.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
88(e)	Enhanced enforcement – Co-ordinating requirements for the Site Supervision Plan System mandated under the Buildings Ordinance and the Safety Management System under the Factories and Industrial Undertakings (Safety Management) Regulation	BD and LD Within 2 years	A working group formed to develop better integration between the Site Supervision Plan System of BD and the Safety Management System of LD is finalizing its recommendations.
89	Coherent policy framework for integrating sustainable construction into sustainable development	Government Within 2 years	Recommendations of a consultancy study commissioned in April 2003 to review the current distribution of responsibilities among policy bureaux/departments and formulate a framework for sustainable construction will be finalized in December 2004.
90	Taking the lead in practising life-cycle costing by major clients	Public sector clients and major clients in the private sector Start within 1 year	For public housing projects, HA has commissioned a consultancy study to develop by late-2004 tools for the selection of building materials and components based on their life-cycle cost and environmental performance. ETWB is preparing a reference guide on application of life-cycle costing in evaluating procurement options for public works projects.
91	Developing the resources for life cycle costing	ETWB, major clients, professional institutions and research bodies Start within 2 years	After collating information from relevant professional bodies and academic institutions, ETWB has identified a number of areas on life-cycle costing models and tools that call for additional research work. Furthermore, EMSD commissioned a consultancy in April 2003 to develop design tools for assessment of life-cycle cost and environmental performance of buildings.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
92	Strengthening defects liability warranty for new buildings	BD, REDA and, developers Within 3 years, subject to enactment of legislation	PCICB agrees with the Government that defects liability warranty for new buildings should remain a matter of agreement between the developer and purchaser rather than being turned into mandatory lease conditions. REDA will issue voluntary guidelines calling for a clear statement in the sales brochure on the duration and commencement date of defects liability warranty as well as an extended warranty period of 12 months.
93(a)	Encouraging green designs – Exemption for floor areas required for green features and facilities	HPLB, BD, Lands D and Plan D Ongoing action	BD, Lands D and Plan D issued the first Joint Practice Note (JPN1) in 2001 to provide incentives for encouraging the provision of green features in new buildings and the adoption of green construction methods. A second Joint Practice Note (JPN2) to encourage the provision of more green features was subsequently issued in February 2002.
93(b)	Encourage green designs – Additional gross floor area to offset the extra cost incurred in the use of green construction methods and materials	HPLB, BD, Lands D and Plan D Within 1 year	The incentives under item 93(a) have provided an initial impetus and the industry has responded favourably by coming up with green features beyond the scope of JPN1 and JPN2. As part of a holistic approach to encourage green buildings, BD has commissioned a consultancy study on the comprehensive environmental performance assessment scheme for buildings for completion by 2005.
93(c)	Encouraging green designs – Waiving premium for modifying existing leases for the provision of green features	HPLB, BD, Lands D and Plan D Within 1 year	See items 93(a)&(b). In addition, the current land administration policy requires premium to be charged if there is an increase in land value obtained through a lease modification.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
94	Wider use of green designs in housing estates of HA	HA, REDA and other major clients Within 1 year	The green design approach has been adopted in new public housing projects, including the promulgation of design guidelines for outdoor landscaping works for leisure and sports purposes.
96	Promoting public awareness of energy efficiency and wider adoption of energy efficient designs. Develop guidelines to help clients and occupiers to assess life-cycle energy cost of construction	EMSD, BD, industry co-ordinating body and research bodies Start within 2 years	EMSD has commissioned a consultancy study for completion in late-2004 to develop tools and guidelines to assess the life cycle energy efficiency of building.
97(a)	Abating environmental nuisance during construction - Giving weight to environmental performance in assessing tenders and performance of contractors	All clients Start within 1 year	For public housing projects, contractors are already required to submit Environmental Management Plan for demolition, piling, building and civil contracts. HA also assigns an appropriate weight to environmental issues in appraising the accession to its Premier League of Contractors. For public works projects, a standard marking scheme including the assessment of contractors' environmental performance have been introduced since June 2002. Procedures for taking regulatory actions against contractors convicted of environmental offences were introduced in April 2003.
97(b)	Abating environmental nuisance during construction - Separate accounts in construction contracts for measures taken to address pollution prevention and control	All clients Start within 1 year	ETWB has introduced in March 2002 additional site tidiness/cleanliness requirements and specific measures governing target setting, monitoring and control, on-site sorting and pay-for-waste-management in mid-2003. This will be complemented by enhanced contractual requirements on environmental nuisance abatement measures. An integrated pay for safety, environment and hygiene scheme has been introduced in public housing projects since October 2003.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
97(c)	Abating environmental nuisance during construction – Encouraging contractors to employ dedicated personnel on-site to assist line managers in managing the environmental aspects of construction activities	All clients Start within 1 year	For public works projects, the appointment of dedicated personnel has been specified as part of the additional contractual requirements for waste management introduced in mid-2003. For public housing projects, contractors are required to employ dedicated personnel under Environmental Management Plans.
98	Regulatory impact assessment on the cumulative impact of the environmental legislation on the construction industry vis-à-vis the community	ETWB and EPD Start within 1 year	EPD has enhanced the business friendliness of its operations following a consultancy study commissioned by the former Business and Services Promotion Unit and made a presentation to PCICB in October 2003 on key initiatives to reduce the regulatory impact on the construction industry.
99	Promotion of partnership between the construction industry and the EPD	EPD Ongoing action	EPD has continued to strengthen partnership with the construction industry through issuing handbooks, producing training packages, as well as organizing seminars and workshops. Two websites disseminating information on green working practices and environmentally friendly construction equipment were completed in April 2003.
100	Charges for waste disposal	ETWB and EPD As soon as possible	The construction waste disposal charging scheme will be launched in mid-2005.
101	Sites for handling construction and demolition materials	ETWB, HPLB, EPD, Lands D and Plan D Start within 1 year	In addition to barging points, a recycling facility and two fill banks are available to cope with increasing volume of construction and demolition materials. ETWB is setting up two sorting facilities to tie in with implementation of the construction waste disposal charging scheme in 2005/06.

Recommendation		Recommended Implementing Parties and Timeframe ¹	Present Position
102	Wider use of recycled materials	Public sector clients Within 2 years	The specifications for public works and housing projects have been revised to facilitate use of recycled materials as hardcore in foundations, sub-base in road pavement and concrete in technically less demanding works. ETWB has identified some 100 projects for using recycled aggregates and has issued guidelines to promote use of concrete paving units made from recycled aggregates.
103	Encouraging more durable buildings to minimize the generation of demolition materials	BD As soon as possible	BD is collecting data on the use of new materials and technologies for building construction in order to compile a new practice note and will carry out a feasibility study on adaptive reuse of existing buildings to minimize maintenance and renovation. A practice note on "Use of Recycled Aggregates in Concrete" was issued in February 2003.
104	Extending the incentive scheme for promoting construction of new environmentally friendly buildings to also cover existing buildings	HPLB, BD, Lands D and Plan D Within 2 years	See item 93. BD will review the effectiveness of JPN1 and JPN2 before considering the feasibility of extending the incentive scheme to cover existing buildings.
105	Comprehensive environmental assessment scheme for buildings with appropriate incentives	BD and other industry stakeholders Within 3 years	BD has commissioned a consultancy study for completion in 2005 to devise a comprehensive scheme to assess the environmental performance of buildings in Hong Kong.
106	Lead agency on construction-related matters	Government Immediately upon endorsement	ETWB took over the former Works Bureau as lead agency on 1 July 2002. The Industry Review Steering Committee has been meeting regularly since December 2001 to monitor the progress of CIRC recommendations.

Recommendation		Recommended Implementing Parties and Timeframe¹	Present Position
107	Establishment of industry co-ordinating body	Government and all stakeholders As soon as possible, subject to enactment of necessary legislation	A bill seeking to establish the Construction Industry Council is being scrutinized by LegCo.
108	Comprehensive review of the entire development process	Government Within 3 years	An overall review of the Buildings Ordinance is currently underway to rationalize the regulatory regime, and the first package of measures to re-engineer the building plan approval process was launched in July 2002. Processing of building plans for signboards as well as application for contractor shed permit has also been improved. The Town Planning (Amendment) Bill was passed by LegCo in July 2004 to streamline and expedite the planning approval process, whilst Lands D has installed since December 2003 a new computer system to monitor the progress of building plan submissions.
109	Review of the implementation progress of CIRC recommendations in 3 years' time	Government In 3 years	An overall review of industry reforms is being conducted by ETWB.