

**Executive Summary of the Investigation Report
on the Management of Construction Projects
by the Housing Authority and the Housing Department**

Background

Problems revealed in late 1999 in a number of public housing projects gave rise to serious community concern. The Ombudsman decided in the public interest to initiate a direct investigation, under section 7 (1)(a)(ii) of The Ombudsman Ordinance, Cap. 397, into the administrative aspects of the Hong Kong Housing Authority (HA) and the Housing Department (HD) in the management of their construction projects.

The Investigation

2. This direct investigation examines the actions and systems, procedures and practices of HA and HD in executing their administrative functions in relation to their roles and responsibilities for HA construction projects, in particular the supervisory mechanism.

Project Management

3. Each project consists of five key stages: planning, design, tender, construction and post-construction. Projects may be undertaken in-house by HD staff or outsourced to consultants through an architect-led consultancy arrangement.

Comparison with Private Sector Practices

4. HA projects differ from private sector developments in two major aspects -

(a) HA projects are exempted from the purview of

the Buildings Ordinance under Section 18 of the Housing Ordinance; and

- (b) No Authorised Persons/Registered Structural Engineers (APs/RSEs) are assigned for HA construction works.

Despite exemption, HD generally observes statutory standards in design and construction.

Findings

5. This Office has studied four cases and focused on two construction projects (one outsourced and the other in-house), as the other two posed no structural safety problem. HA/HD project management arrangements may have worked well in times of well-regulated production. In the 1990's, however, the system seems to have thrown up problems hitherto not evident. Our investigation has identified a range of administrative issues within the operating systems and working environment of HA/HD making for problems in project management as follows -

(a) Focus on paper work

HD has well over 30 volumes of procedural manuals (in English only) and guidelines on the planning and construction of projects. Much time and resources have been devoted to documentation and paper work, at the expense of time for site inspection and supervision.

(b) Insufficient site inspection

Site inspections were inadequate. Some site

staff admitted that they were not conversant with the operational manuals or even some of their duties. The ignorance of the site staff undermined the efficient management of work sites.

(c) *Inexperience of staff*

HD relied on contractor's superintendence on building sites and on its own staff for surveillance. However, some staff had little experience or training in supervising some key aspects of the works.

(d) *Unsatisfactory staff attitude*

HD liaison team relied heavily on consultancy firm for technical and quality checking and some focused mainly on the time and cost of the project with little attention to the performance of the consultants and contractors.

(e) *Unclear lines of command and excessive delegation*

Lines of command and responsibility were unclear, with some members assuming multiple roles, resulting in a lack of effective monitoring of different levels of staff involved in projects. Excessively extensive delegation was also evident, with the inspection duties of both the Project Structural Engineer and the Project Clerk of

Works delegated to the Works Supervisor, the most junior and an inexperienced officer in the team.

(f) *Inadequate supervision and control*

Multiple subcontracting by the main contractor undermined control over site progress and performance standards.

(g) *Risk of Lowest Tender*

Tenders being awarded to the "lowest bid" may be an invitation to risk of poor performance and exploitation of the system by some contractors.

(h) *Absence of resident engineer*

There was a lack of appropriate professional staff at HA construction sites to supervise key works.

(i) *Disregard for professional ethics*

Some contractors had little regard for professional ethics. Resident site staff signed records without question and in some case, even without inspection.

Other Contributing Factors

6. This Office has interviewed members of the HA and officials of HB and HD in the course of investigation. Some

factors beyond HA/HD control may be summarised as follows -

(a) Economic downturn

Keen competition lowered tender prices and cut profit margins to an unprecedented low, setting the scene for some contractors to resort to unprofessional, or even illegal, practices.

(b) Suspect collaboration and complicity

HA projects, massive in budget and volume, gave rise to temptation for criminal collaboration.

(c) Uneven land supply

Supply of land for public housing experienced considerable fluctuations in the 1990s, creating difficulties for HD in deployment of resources and quality control and assurance.

(d) Bunching of housing production

Uneven land supply resulted in bunching of housing production. Since early 1995, HA/HD had been alive to the problem and endeavoured to redress it. HA/HD had conveyed their grave concern to Government.

(e) Strain on staff

Bunching had generated considerable workload

and pressure on HD's works-related staff, particularly those for site supervision.

(f) *Absence of third-party audit*

HA projects are not subject to the Buildings Ordinance. Third-party scrutiny would enhance vigilance on site.

(g) *No say over personnel matters*

HA also has little say over such key personnel matters as the appointment of the Director of Housing or the civil servants working to him.

(h) *Culture and practices of the industry*

Across the industry, a key consideration has been to make money fast, sometimes at the expense of quality, workmanship and the duty of care. Multiple subcontracting, insufficient quality workers, inadequate investment for development and high construction cost have marked, and marred, the local industry in culture and practices. The result is shoddy product and little commitment to service or pride in a project.

Remedies and Improvement Initiatives

7. HA/HD have been commendably quick to rectify by a series of measures to improve the quality of public housing production, including the reform package of 50 Quality Housing Initiatives (QHI) launched in April 2000 for implementation in

two phases. 25 recommendations address customer concern and building safety; the other 25 make for improvement in the construction process. This is on track.

8. The Construction Industry Review Committee (CIRC), appointed by the Chief Executive in April 2000 to examine the then current state of the construction industry and to identify specific actions and good practices for improvement, released its report in January 2001 with 109 recommendations. They should help to shape up the local construction industry generally.

Observations and Opinions

9. From our investigation, we have some views and observations.

Roles and responsibilities of major players

(a) Relationship between HA and HD

Theoretically, HA decides on policy while HD is responsible for operational and technical decisions. In practice, HA committees are heavily involved in operational matters, inevitably slowing down operations. HA and HD should critically review their working relationship.

(b) HA committee structure and decision-making process

A consultant commissioned by HA to review the production process has pointed out problems

arising from the variety of bodies involved in the project development approval process, the substantial changes made by these bodies through the various design and construction phases and the lack of rigorous scrutiny of these changes by project managers. For greater administrative efficiency, more effective control and clearer accountability, HA should review and tighten the approval procedures.

(c) Roles, functions and responsibilities of HD

Although HA may employ its own staff, HD is staffed mostly by career civil servants and staff employed directly by HA represent only 9% of establishment. To enhance accountability, HA should have greater scope to hire and fire staff. More flexible recruitment and deployment of staff will enable HA to respond more effectively to its requirements.

(d) Tripartite Relationship: HA, HD and HB

HA, HD and HB are intended to have clearly defined roles and responsibilities, with HB and HA being responsible for formulation of public housing policy at the macro and micro level respectively and HD for implementation of the policies set by HA. In reality, the dividing line between macro and micro public housing policies is rather blurred, with grey areas in between. This had at times created

difficulties for HD and tension for HA and HB, raising suspicions of split loyalty towards HA and HB among HD officials. Recognising the problems, Government has in June 2000 set up a Review Committee under the Chief Secretary for Administration (CS) to review the roles and responsibilities of HA, HD, HB and Hong Kong Housing Society (HKHS) and their working relationship.

(e) Responsibility and accountability

Project professional, technical and site supervisory staff concerned in HD have the responsibility to report deficiencies in the systems and any problems on site. Senior directorate in HD should regularly review the systems for project management and related operations. They also have a duty to guide staff and monitor their practices and performance.

(f) Legislation

HA projects are not subject to the Buildings Ordinance. A common perception, and criticism, is that exemption from independent checks has caused HA/HD to be less aware of prevailing building practices and requirements; that absence of criminal sanctions opens up temptation for lax attitudes or, worse, for irregularities. HA/HD have agreed in principle to bring HA construction projects under the Buildings

Ordinance in the long term. As migration towards full building control takes time, HA should as a stopgap measure consider the feasibility of amending the Housing Ordinance to impose criminal sanctions on defaulting contractors and consultants.

Project management control

(g) *Unclear responsibilities and lines of command*

HD should delineate clearly the responsibilities and lines of command among parties involved, to make for well co-ordinated and more effective project management.

(h) *Over-emphasis on documentation*

Quality of delivery is far more important than documentation for its own sake. Guidelines for staff are necessary but excessive documentation not only generates unnecessary paper work but also reduces the time for inspection and field supervision. HA/HD should reduce and rationalise operating manuals and guidelines for staff and consultants/contractors.

(i) *Inadequate monitoring of consultants*

HD did not clearly delineate the roles and responsibilities for project management duties for outsourced projects but expected

the consultants to co-ordinate the works of their sub-consultants throughout the development and construction stages. HD should review the existing practice of leaving most, if not all, technical matters to consultants without audit by HD staff.

(j) Attitude and approach of HD staff

HD should re-examine its deployment of staff for works supervision, enhance their training and re-orientate their approach and attitude generally. Positive communication from the ground to the top and vice versa is essential for efficient and effective operations.

Site supervision and monitoring

(k) Deficiency and inadequacy of existing practices

HD should overhaul its site supervision practices, particularly in relation to staff for works supervision. Extensive delegation without counter-checking is unreasonable and irresponsible, positively unfair to junior colleagues and potentially detrimental to the quality of public housing.

Tendering control and contract management

(l) Exploitation of "lowest bid" practice

HA/HD should build into the tendering system

measures for assessing the reasonableness of prices and practicability of proposals.

(m) Loss of control over multiple subcontracting

HD should try to minimise multiple subcontracting and certainly to reduce it to a manageable scale. HD should reduce the chain of subcontractors, and introduce direct control over them instead of dealing only with the main contractor.

Control under Buildings Ordinance

(n) Exemption from Buildings Ordinance

To redress the lack of independent third-party audit, HD has taken steps under the QHI towards gradually subjecting HA projects to the Buildings Ordinance. This would enhance staff vigilance and quality assurance.

(o) Penalties not consistent with private sector counterparts

HD staff failing to discharge their duties satisfactorily and professionally would be subject to disciplinary action under Civil Service Regulations - administrative rather than legal sanctions. Defaulters, whether civil servants or their private sector counterparts, should receive the same treatment.

External factors

HA/HD has had little, if any, control over some external factors, which might well have contributed to their building problems.

(p) Economic downturn

(q) Uneven land supply

(r) Bunching of housing production

(s) Industry culture and practices

HA/HD initiatives and remedial measures

HA/HD have sprung promptly into action to resolve problems and rectify deficiencies. Most of these remedies and improvement measures in their 50 QHI have already been or are being implemented.

(t) Audit by Building Authority

HA/HD are already strengthening their control mechanism to prepare for scrutiny by the Building Authority (BA). For projects outsourced since August 2000, HA/HD have incorporated requirements for designating AP/RSE to perform equivalent functions stipulated in the Buildings Ordinance.

With HA projects brought under the BA, Government should examine the scope for similar application to public works building

projects for consistency.

(u) Reviewing QHI

HA/HD have established a Progress Monitoring Committee since May 2001 for periodic review of the QHI implementation.

Conclusions

10. On the basis of our investigation, this Office has come to the following conclusions -

- (a) Unclear working relationships (and at times grey areas) amongst HB, HA and HD are not satisfactory or conducive to having positive lines of responsibility and accountability. This could put HD staff under some pressure from split loyalty. Certainly, it has given rise to perception of such and uneasiness amongst some HA members.
- (b) In setting production targets, the Administration has not sufficiently taken into account the views of HA/HD, or its capacity for delivery.
- (c) Members of HA and its standing committees are essentially part-time volunteers. But, they have to make important decisions either at the full HA or under delegated authority

respectively. Consideration should be given to whether the responsibilities of HA members have to shoulder are commensurate with their part-time status.

- (d) HD should re-examine its tendering practices and introduce measures for preventing exploitation of the tendering system.
- (e) Multiple subcontracting without ensuring adequate capability to exercise competent control or appropriate monitoring puts projects at risk, especially where the main contractors fail to supervise subcontractors or have little regard for the duty of care.
- (f) The administrative issues identified indicate collectively deficiencies in HD's project management system for redress. These are now being addressed with the roles and responsibilities of key players more clearly defined under HA's QHI.
- (g) HD has been placing far too much importance on paper work and has tended to supervise by documentation and to monitor by paperchase.

- (h) As many of the problems identified in construction projects are attributable to unqualified workers on site and unsatisfactory attitude of some HD staff and consultants/contractors, HD should focus on training to improve staff calibre and attitude, and enhance vigilance to monitor consultants and contractors.
- (i) It would be in the interest of HA/HD, the Administration and the community at large to bring HA construction projects under the Buildings Ordinance as soon as practicable.
- (j) The local construction industry overall needs general improvement in culture and practices, research and development as demonstrated by CIRC's 109 recommendations.

Recommendations

11. The Ombudsman has made 27 recommendations for consideration by HA/HD and eight for the Administration. Recommendations (c) to (aa) feature in HA/HD's QHI plan. This Office acknowledges and appreciates their earnest endeavours in implementing improvement measures.

For HA/HD

Organisation and Structure

- (a) To review the roles and responsibilities of, and the working relationship between HA and its standing committees and between those committees and their corresponding HD branches;
- (b) To review whether the responsibilities of HA members have to shoulder are commensurate with their part-time status;
- (c) To review the approval process for HA project development to cut confusion over changes, streamline workflow and enhance efficiency for better quality of works;
- (d) To review the staffing policy to improve flexibility of staff deployment and efficiency;

Communication and Leadership

- (e) To promote among staff commitment to service in an open and accountable culture;
- (f) To enhance channels for internal communication and staff feedback;
- (g) To foster a closer working relationship and mutual trust between the directorate and staff;

- (h) To enhance mechanism for consultation with staff;
- (i) To continue to convene workshops and seminars for fostering frank communication and cooperative partnership amongst staff across HD grades and through all ranks;
- (j) To review guidelines periodically to update and streamline work procedures as appropriate;

Contract Management

- (k) To sustain efforts in improving listing and tendering practices, in particular monitoring of subcontractors;
- (l) To minimise multiple subcontracting as far as practicable;
- (m) To review and define the roles, responsibilities and accountability of those involved in project management;
- (n) To devise a more structured and better coordinated site supervision system;
- (o) To provide sufficient qualified and experienced staff for site supervision;
- (p) To review and define the roles and responsibilities of consultants on

outsourced projects and to monitor their performance more closely;

- (q) To set up a committee for each project and charge it with responsibilities for overseeing its implementation from inception to completion;

Training and Professionalism

- (r) To intensify induction and refresher training for site supervisory staff;
- (s) To intensify ethical and professional training for site supervisory staff;
- (t) To review periodically training materials for site supervisory staff;
- (u) To cultivate, nurture and sustain professional culture among staff through continuing professional development within HD;
- (v) To promote registration of construction workers/site supervisory staff/subcontractors for quality delivery of HA projects;

Partnership with Contractors/Consultants

- (w) To strengthen the partnership with contractors and consultants by improving communications;

- (x) To continue to review potentially prejudicial contractual terms for better risk-management and more equitable risk-sharing relationship;

Consultation, Review and Feedback

- (y) To review periodically the progress of implementing the remedial and improvement measures under QHI, in collaboration with relevant bodies and professionals in the construction industry;
- (z) To develop closer liaison and consultation with these bodies for sustained improvement in arrangements for site supervision of HA projects;

Promotion of better culture

- (aa) To join forces with Government and the industry to positively influence and promote a more responsible culture;

For the Administration

Working Relationship

- (bb) To publish the report of the CS' Review Committee, upon completion, to clarify the respective roles, responsibilities and working relationship between HB and HA/HD and to enhance accountability;

External Control

- (cc) To bring HA projects within the purview of the Buildings Ordinance;
- (dd) To apply to HD staff controls applicable to their private sector counterparts under the Buildings Ordinance;

Legislation

- (ee) To expedite amendment of the Housing Ordinance and the Buildings Ordinance to bring HA projects within the building control regime.

Other Matters

12. Unless there is improvement across the industry, reform within HA/HD alone or even across the Administration would not achieve the desired results. The Ombudsman urges the Administration -

- (ff) To work in partnership with relevant bodies to expedite implementation of the 109 recommendations in the CIRC report for early improvement to the local construction industry (Works Bureau);
- (gg) To examine the scope for public works building projects to be brought within the purview of the Buildings Ordinance (Planning and Lands Bureau and Works Bureau);

- (hh) To review and strengthen the existing administrative arrangements for inviting and selecting tenders for public works building projects to redress the much criticised practice of “normally” awarding contracts to the “lowest bidder” (Works Bureau); and

- (ii) To rationalise in consultation with HA/HD the basis of land supply statistics for clearer information (*Housing Bureau*).

Office of The Ombudsman

Ref. OMB/WP/14/1 S.F. 86

March 2002