

立法會
Legislative Council

LC Paper No. CB(1)2364/11-12

Ref : CB1/PS/2/09

Panel on Development

Report of the Subcommittee on Building Safety and Related Issues

Purpose

This paper reports on the deliberations of the Subcommittee on Building Safety and Related Issues ("the Subcommittee").

Background

2. Building neglect has been a long-standing problem in Hong Kong. The presence of aging buildings lacking proper care and maintenance poses potential threats to residents and the public at large. Defects such as structural deterioration and concrete spalling pose safety hazards not only to the building occupants, but also to other building users and pedestrians nearby.

3. On 29 January 2010 at about 1:40 pm, the building at 45J Ma Tau Wai Road, To Kwa Wan, Kowloon, collapsed, causing four deaths and two injuries. The subject building was a five-storey tenement building built in 1955 and the collapse incident aroused grave concern of the community over building safety of dilapidated buildings. At the meeting held on 23 February 2010, the Panel on Development ("the Panel") received a briefing from the Administration on the immediate follow-up actions and initial investigation on the incident. To enable more focused discussion on the building safety concerns identified in the investigation of the incident and the Government's efforts in enhancing and promoting building safety in Hong Kong, Panel members decided at the meeting to set up the Subcommittee. The Panel obtained approval from the House Committee at the latter's meeting on 12 March 2010 to activate the Subcommittee.

The Subcommittee

4. The Subcommittee comprises 13 members, with Prof Hon Patrick LAU Sau-shing as the Chairman and Hon KAM Nai-wai as the Deputy Chairman. The terms of reference and the membership list of the Subcommittee are given in **Appendices I and II** respectively. The Subcommittee commenced work on 25 March 2010. During the three sessions from 2009-2010 to 2011-2012, the Subcommittee held nine meetings, including eight meetings with the Administration.

Deliberations of the Subcommittee

5. The major areas of the Subcommittee's study include the following --

- (a) the Ma Tau Wai Building Collapse Incident ("the Incident"), including the causes of the Incident, immediate follow-up actions and recommendations for improvement to enhance building safety (paragraphs 6 to 22);
- (b) Administration's proposed multi-pronged measures to enhance building safety (paragraphs 23 to 33);
- (c) assistance provided to building owners (paragraphs 34 to 40);
- (d) manpower resources in the Buildings Department (paragraphs 41 to 48);
- (e) enforcement against unauthorized alteration works inside private flats and industrial premises (paragraphs 49 to 55); and
- (f) seismic-resistant design requirements for new buildings in Hong Kong (paragraphs 56 to 57).

The Ma Tau Wai Building Collapse Incident

6. The Subcommittee has discussed in length the Incident. The major focuses include causes for the Incident, immediate follow-up actions and recommendations arising from the Coroner's Inquest on the death of four persons in the Incident and the review conducted by the Buildings Department ("BD") on the Incident.

Causes for the Incident

7. The report released by BD in April 2010 on the Incident revealed that in response to a complaint, BD had conducted an inspection on the subject building in November 2009 and another inspection in December 2009 to follow up the advisory letter for building repair issued to the owner after the first inspection. However, no imminent structural danger was noted in both inspections. The Administration advised that with a view to establishing the cause of the collapse, BD had carried out investigation on the Incident based on building records, site inspections, witness statements, interviews with relevant parties and structural analysis. Evidence revealed the following situations --

- (a) Alterations in the form of sub-divided flats were noted on all upper floors.
- (b) Repair works and removal of unauthorized building works ("UBWs") on the ground floor commenced on 23 January 2010 and were still in progress in the morning of 29 January 2010.
- (c) Three columns, namely C11, C12 and C13, collapsed in the Incident. Remnants of the three columns were noted at ground level after the collapse.

8. The Subcommittee held a meeting in April 2010 to review the building safety issues arising from the Incident. Members enquired whether the presence of sub-divided flats which increased loading on the structural capacity of the building, the carrying out of repair works by non-registered contractors/workers, and lack of supervision on building works had led to the building collapse. They strongly urged the Administration to find out the real causes for the Incident and release the full report so that legal action could be taken against liable parties.

9. The Administration advised that based on the site inspections, structural analysis and statements obtained from the interviewees, it was BD's preliminary conclusion that the collapse of the building was likely to be triggered by the disturbance of column C13 by some external forces rather than additional loadings imposed by sub-divided flats, aging of building material and deterioration of structural components. It stressed the need to conduct further investigation, including building material testing and forensic study in order to identify the origin of these forces.

10. BD instigated prosecution under section 40(2B)(a) of BO against the building contractor involved in the Incident in January 2011. According to BD, the full investigation report on the Incident together with relevant information had been examined by the Department of Justice before deciding on taking the prosecution. Hearing for the case by the Magistrate's Court commenced in mid-May 2012 and is still in progress.

Coroner's Inquest on the Incident and the Buildings Department's initial response

11. A Coroner's Inquest was held from 8 to 16 August 2011 to look into the cause of death of four persons in the Incident. According to the Coroner's findings delivered on 16 August 2011, the death of the four persons was caused by accident and that no person should be held criminally liable for their death. In addition, the Coroner made a number of observations about the Incident. The major observations of the Coroner related to BD are summarized below --

- (a) The building should have been declared as dangerous by BD two months before the collapse;
- (b) BD staff who handled the case went into routine and might have made incorrect judgment after the inspection;
- (c) As the owners usually would not comply with the advisory letter issued by BD, it is not necessary to issue such advisory letter for buildings that have imminent risk or danger. BD should closely monitor the progress of rectification works (through regular inspection, say, every two weeks) to ensure compliance of repair orders; and
- (d) For cases of emergencies related to buildings, and non-emergency reports on dilapidation of buildings, the inspection should be carried out jointly by a Building Surveyor ("BS") and a Structural Engineer ("SE").

12. The Subcommittee discussed BD's initial response to the observations of the Coroner at a meeting in August 2011. Members noted that during the Coroner's Inquest, different views were expressed among the expert witnesses on whether the capacity of the collapsed columns was capable of sustaining the loads from the building at all critical stages. While this reflected the difficulty in arriving at a definitive view about whether a building had already reached the critical stage of collapse,

members considered that BD should examine its existing manual and instructions in providing staff with guidelines regarding the matters they should pay attention to during inspection in determining whether a building had imminent danger and hence warranted immediate action. The Subcommittee supported BD's plan to conduct a comprehensive review ("the Review") of the building safety enforcement manual and instructions to ensure that they were clear and could cater for the needs of present-day circumstances. In order to enhance neutrality and public confidence in the Review, the Subcommittee welcomed the Administration's decision to appoint independent experts to examine the findings of the Review. Members further suggested that the approach, scope and contents of the Review should be decided by the independent experts instead of BD, and urged that the findings of the Review and the independent experts' views be released to the Subcommittee.

13. As regards how BD officers handled the case before the collapse of the building, the Subcommittee noted that an expert's testimony at the Coroner's Court had revealed that the Building "was in a dying state" (彌留狀態) at the time of BD's inspection and queried why BD had not made the same observation during the inspection of the building in 2009. The Administration explained that the observations of the officers concerned were based on the observation of the nature, extent and severity of defects from the inspection of all external elevations and common parts of the whole building and the inside of some individual premises where access could be gained at the time of inspection. It should be noted that the primary concern of the Coroner's Inquest was to ascertain the causes of death of the deceased in the Incident rather than to establish the causes of the building collapse, and the description that the collapsed building "was in a dying state" (彌留狀態) was not a professional term to describe the condition of a building. The Administration pointed out that the objective and technical findings of the expert and BD's inspection had many areas in common. The Administration re-iterated that based on the data collected at the time of inspection, the building should not have collapsed if not for the exertion of an external force. In the light of the Coroner's observations, BD would carry out an internal assessment on the performance of the officers concerned in handling the reports on dilapidation of the building.

14. On the issuance of advisory letters before statutory orders, the Administration explained that since statutory orders were legal documents, BD had to exercise due care in issuing them and time was required for checking building ownership and preparing the statutory orders for issue. Because of this, under the existing practice, in cases where BD decided to

issue a statutory repair order, an advisory letter would be sent to the owners in the first instance to alert them of the dilapidated condition of their buildings, notify them that a statutory order would be served shortly and advise them to start the arrangement for the repair works earliest possible. The advisory letters served to remind the owners of their due responsibility for their properties when BD identified defects in their buildings. While recognizing that building owners had responsibility maintaining safety of their buildings, Subcommittee members stressed the importance for the Administration to intervene when and where irresponsible owners failed to comply with building safety requirements and put public safety at risk. Given the large number of outstanding non-compliant cases with BD's statutory orders and that many building owners had adopted tactics to delay compliance by lodging appeals to the Appeal Tribunal Panel (Buildings) ("the Appeal Tribunal Panel"), members called on the Administration to consider measures to expedite compliance from concerned owners, such as increasing the number of members serving on the Appeal Tribunal Panel so that more appeal cases could be processed. It was also necessary for BD to step up efficiency of its enforcement actions as a means to enhance its image and credibility.

15. Upon members' request, the Administration provided information in **Appendix III** on BD's procedure in dealing with building defects or dangerous buildings under relevant provisions, including the time allowed under BD's established practice for the major steps during the enforcement actions. It advised that BD had established practice prescribed in manual and relevant instructions on the procedure of enforcement actions for building safety. BD would look into the existing procedure for follow-up action in respect of the enforcement actions under the Review. The Administration further took note of members' views and agreed to review the appeal mechanism in examining ways to expedite processing of appeal cases.

16. Concerning the Coroner's suggestion that BD's building inspections should be jointly conducted by a BS and a SE, the Administration pointed out that BD had established guidelines on cross discipline internal consultation on building safety-related issues, which included consultation on structural engineering and building surveying matters. The first inspecting officer, regardless of his discipline, had the full responsibility and would be fully accountable for his decision as a professional and an officer of BD in discharging his duties. When an officer considered the assessment of a building safety problem was beyond his expertise, he was required to seek assistance. Where necessary, the officer would also consider whether an investigation order should be issued under the

Buildings Ordinance (Cap. 123) ("BO") to require the owner to appoint an Authorized Person and a Registered Structural Engineer to act as his structural consultant to conduct a detailed investigation on the building. The suggestion of conducting inspection by a joint inspection team in every case might not be an efficient and effective way in deploying resources, and there was also concern about possible dereliction of duties of the first inspecting officer. Nonetheless, BD agreed that the issue would be covered in the Review.

17. Some members also opined that BD should address the cross-disciplinary conflicts involving BS and SE grades in the Department in a fair and impartial manner. The Administration advised that BD underwent a major re-organization in 2011 and the details had gone through lengthy staff consultation. Since 2006, BD had been moving towards a 1:1 manning ratio for recruitment of BS and SE grade posts related to the safety of existing buildings and the number of SE posts had increased from 129 in 2006 to 189 as at August 2011.

Buildings Department's Review of enforcement procedures and practices for dilapidated buildings and views of the independent experts

18. BD set up a dedicated working group ("the Working Group") consisted of experienced staff from BS and SE grades of the Department to undertake the Review which was completed in December 2011. The scope of the Review included the conduct of site inspections and handling of emergency cases; the need for a joint inspection team consisting of both BSs and SEs to handle reports from the public on building defect/dilapidation, the referral of cases for cross-discipline consultation between BS and SE grades, as well as the corresponding demarcation of responsibilities; and the practice of issuing advisory letters prior to serving investigation/repair/demolition orders, etc. In February 2012, the Secretary for Development appointed Professor KO Jan-ming and Mr Daniel LAM Chun, two experts in the fields of structural engineering and building surveying respectively, to review BD's report. The Subcommittee discussed the findings and recommendations of the Review and the views of the independent experts as well as BD's responses and follow-up actions to the Review at a meeting in June 2012¹. The Subcommittee noted the following major recommendations of the Working Group --

¹ Report on the findings and recommendations of the Working Group on Review of Building Safety Enforcement Procedures and Practices is at Annex B to the Administration paper (LC Paper No. CB(1)2099/11-12(01)). The executive summary of the review conducted by the two experts and BD's responses to the observations and recommendations of the two experts are at Annex C and Annex D to the Administration paper (LC Paper No. CB(1)2099/11-12(01)) respectively.

(a) Procedures for Site Inspection

- (i) To formally incorporate into BD's inspection procedures the conduct of desk-top study on the concerned building (except cases involving only minor defects) before carrying out site inspection.
- (ii) To formulate clear guidelines for BD staff in deciding the removal of decorative materials when conducting assessment on the structural integrity of a building, and provide a standard inspection tool kit for all inspecting officers.
- (iii) To add a new rating of "V -- Severe" in the severity index scale to the existing four ratings: "I -- Acceptable", "II -- Moderate", "III -- Varied", and "IV -- Poor". For cases that fall under the new rating of V, the inspecting officer will need to consider the necessity of carrying out emergency remedial works for the building, as well as whether the situation calls for the issuance of a closure order or demolition order.

(b) Cross-discipline Consultations

To strengthen the existing arrangements on cross-discipline consultation to clearly define those cases which need to go through the process by making reference to the ratings under the severity index scale.

(c) Service of Orders and Follow-up Action for Building Dilapidation Cases

To implement improvement measures to enhance the efficiency and effectiveness of the following up actions for inspections, including --

- (i) revising the existing guidelines to supplement that inspection reports should be submitted for endorsement within one month of the site inspection, statutory orders should be issued within one month after the ownership details of the concerned building are available and no later than three months after the endorsement of the inspection report by a senior officer;

- (ii) specifying the need and timing for conduct of additional inspections for a building in the inspection report for endorsement by the senior officers of BD; and
- (iii) strengthening the monitoring of outstanding building dilapidation cases and the work of BD's consultants and contractors, as well as putting in place a procedural audit mechanism to ensure BD's manuals and guidelines have been duly followed in the process.

19. As regards the recommendations made by the Coroner in August 2011, the Subcommittee noted that the Working Group had re-iterated the view that the suggestion of conducting joint inspection by a BS and a SE for all cases might not be an efficient and effective way of deploying resources as the inspection for most cases could be competently handled by a single officer from BD and the internal cross consultation mechanism already in place would ensure professional advice be solicited in a timely manner. As for whether BD should issue repair orders instead of advisory letters first for buildings considered as dangerous or liable to become dangerous, the Working Group maintained its view that as the issue of advisory letters and preparation of statutory orders were performed in parallel, the issue of advisory letters would not affect the progress of BD's enforcement work in any manner. Regarding the Coroner's recommendation that BD should closely monitor the progress of rectification works through regular inspection to ensure compliance of repair orders, the Working Group recommended that all outstanding cases should be regularly reviewed by BD's sectional monitoring committees and that inspection reports on building dilapidation cases should include recommendations on when the subject building should be re-inspected.

20. The independent experts had examined BD's review report and made a number of recommendations. The major ones were --

- (a) BD should ensure that a staff training policy was in place, and strengthen the training for its staff, in particular the new recruits.
- (b) BD should consider adopting the use of more advanced equipment in its operations, such as monitor the dilapidation conditions of a building through the use of sensory systems operated through the Internet.

- (c) BD should step up its public education and publicity efforts by joining forces with other external bodies, including the professional institutions, District Councils, the Hong Kong Housing Society ("HKHS") and the Urban Renewal Authority ("URA"), and consider setting up teams proficient in communicating with the public to handle enquiries and complaints that do not require professional or technical input.
- (d) BD should review its manpower needs and staffing arrangements, in particular, explore the feasibility of having both BSs and SEs in the same team so as to capture the synergy from having members of both disciplines working in a single team.

21. On the recommendations from the Coroner, the experts considered that since it was BD's existing practice to arrange joint inspection by staff of BS and SE grades, BD should set up clear guidelines on when joint inspection should be conducted. Regarding the practice of issuing advisory letters, BD should draw up clear guidelines on distinguishing emergency and non-emergency cases as BD would take immediate follow-up action instead of issuing advisory letters for the former. On the Coroner's recommendation to closely monitor the progress of repair works for building dilapidation cases, the experts agreed with the Working Group's suggestion of requiring officers to specify the re-inspection cycle for dilapidated buildings with statutory orders.

22. The Subcommittee stressed the importance for BD to take prompt action to effect emergency remedial works for buildings identified with serious building defects. Members enquired the follow-up action for cases rated with "IV -- Poor" or "V -- Severe" and when cross-discipline inspection by both BSs and SEs would be conducted. The Administration explained that joint inspection to conduct in-depth structural assessment on a building would be activated for cases reaching the rating of IV or V. The new rating V was split from rating IV, and buildings under this category called for urgent actions such as emergency works, serving of closure orders or demolition orders. As regards the timetable for implementing the various improvement measures of the Review, the Administration advised that BD would set up a dedicated task force within a month to consider in a comprehensive manner how the recommendations should be implemented, taking into account the technical, manpower, and financial resource implications. The Development Bureau would provide the needed policy steer and support to BD, including securing additional manpower and financial resources, and would monitor and review the new

enforcement procedures and practices for dilapidated buildings on regular basis to ascertain whether further changes were necessary.

Government's multi-pronged measures to enhance building safety

23. The Chief Executive announced in his 2010-2011 Policy Address that the Administration had decided to adopt a new multi-pronged approach to enhance building safety covering four major areas, namely legislation, enforcement, support and assistance to owners, and publicity and public education. The details are summarized in the ensuing paragraphs.

Legislation

24. The Administration aimed to provide and maintain a modernized, efficient and user-friendly statutory control regime to meet the development needs of Hong Kong, and at the same time provide adequate enforcement power to deter non-compliance. It would rely on the Minor Works Control System ("MWCS"), which came into effect on 31 December 2010, to provide a lawful, safe as well as convenient means for building owners to carry out small-scale building works. With the introduction of MWCS, BD would register existing practitioners and arrange suitable training for them before their registration as minor works contractors. BD would also provide guidelines and advice by issuing codes of practice and practice note to facilitate contractors to carry out works safely and in compliance with the relevant standards.

25. Further to MWCS, the Administration introduced the Buildings (Amendment) Bill 2010 in February 2010 to provide for the implementation of the Mandatory Building Inspection Scheme ("MBIS") and Mandatory Window Inspection Scheme ("MWIS"). The Bill was enacted as the Building (Amendment) Ordinance 2011 in June 2011.

26. Under MBIS and MWIS, owners of private old buildings are required to carry out inspection and, where necessary, repair works in relation to common parts, external walls and projections as well as windows of the buildings. The registered inspectors appointed for the works are required to report to the Building Authority UBWs identified in the common parts and external walls of the buildings and assess the safety conditions of UBWs. For UBWs posing an imminent danger, BD will order their removal. Implementation of the two schemes will enable BD to have a better grasp of UBWs conditions of old buildings in Hong Kong.

27. To further strengthen the building safety regime, the Administration introduced the Buildings Legislation (Amendment) Bill 2011 in November 2011 to bring in new measures, including extension of the surcharge on defaulted works, extension of the penalty provision to cover persons refusing to share cost of works by owners' corporations ("OCs") for compliance with statutory orders or notices, empowering BD to apply to the Court for a warrant for entry into individual premises for inspection, introducing a signboard control system, and requiring registered inspectors to comprehensively report exterior UBWs under MBIS. Resumption of the second reading debate on the Bill will be held in July 2012².

28. To tackle the increasing trend of sub-divided flats, the Administration proposed to control the quality of the associated works at source by putting such works under the control of MWCS. This would provide better guarantee on the quality of works, and the safety and nuisance (e.g. water seepage) problems associated with sub-division works would be minimized. The relevant subsidiary legislation was enacted in June 2012.

Enforcement

29. BD's 10-year programme against UBWs came to an end on 31 March 2011. In response to views in the community that a tougher stance should be taken against non-compliant owners to create a stronger deterrent effect, the Administration extended the coverage of "actionable" UBWs to include UBWs on rooftops, podiums, as well as in yards and rear-lanes of buildings with effect from 1 April 2011. If the items under complaint were confirmed as "actionable" UBWs, BD would first notify the owner of the UBWs by means of an advisory letter and adopt a tougher stance by issuing statutory orders for rectification works if the owner is not able to rectify the situation within the specified period. BD would also conduct a stock-taking exercise on all UBWs on the exteriors of private buildings in the urban areas. Various new large-scale operations ("LSOs") would also be launched to tackle the issues of UBWs on rooftops, podiums, as well as in yards and rear-lanes; and of dilapidated buildings and sub-divided flats.

² The report of the Bills Committee on the Bill is at: <http://www.legco.gov.hk/yr11-12/english/hc/papers/hc0601cb2-2191-e.pdf>.

Assistance to building owners

30. The Administration, in collaboration with HKHS and URA, has been providing technical and financial support for building owners in promoting building safety and carrying out timely maintenance and repairs for their buildings. At the time of the announcement of the new multi-pronged approach, there were no fewer than seven loan, grant and technical assistance schemes operated by BD, HKHS and URA. The Administration thus proposed to review and streamline the arrangements for these schemes with a view to providing greater convenience and better support to owners in need. The Administration completed the review in collaboration with HKHS and URA in early 2011 and introduced the Integrated Building Maintenance Assistance Scheme ("IBMAS") in April 2011. With the introduction of IBMAS, owners are now able to apply for financial assistance from BD, HKHS and URA through a single interface. IBMAS also has relaxed eligibility criteria and provides enhanced subsidies to owners.

Publicity and public education

31. The Ma Tau Wai Road building collapse incident and the large backlog of statutory orders of BD pending the issuance or follow-up revealed that the building safety awareness of the general public was still weak. The Administration considers it necessary to foster a building safety culture in Hong Kong so that all stakeholders involved would possess the self-awareness to properly observe building safety. The Administration has been organizing publicity and public education activities covering various topics such as removal of UBWs, alteration and addition works and building maintenance, etc. The Administration would also pursue the idea of incorporating building safety into the liberal studies curriculum of school education by providing teaching kits as appropriate, and launch a "community monitoring" programme to mobilize every member of the community to play a part to report building safety problems.

32. The Subcommittee received a briefing on the Administration new measures to enhance building safety at a meeting in January 2011 and continued to monitor implementation of various measures.

33. On the focus of the multi-pronged measures, some Subcommittee members were of the view that the Administration should accord high priority to tackle problems of UBWs, water seepage, and sub-divided flats. As a tough approach against UBWs might lead to undesirable repercussion in the community, the Subcommittee cautioned that the Administration

should be flexible with its enforcement actions. There was a suggestion for the Administration to consider registering UBWs which had been in existence for a long period of time subject to certification of their structural safety. In fairness to all building owners, BD should adopt a unique arrangement giving owners same period of time to clear their UBWs. In response to these suggestions, the Administration pointed out that when a stringent enforcement policy was in place, it would not be appropriate for individual officers of BD to exercise discretions deviating from the established policy in clearing UBWs. The Administration further took note of members' views on the needs to enlist the support of legal professionals to deal with legal issues relating to UBWs and to provide adequate resources for BD to undertake increased workload arising from the control of UBWs. The Subcommittee also supported in principle the legislative proposals to introduce a signboard control scheme, warrants for inspection of interiors, and surcharge over the cost of works to be recovered from non-compliant owners as well as penalty for refusing to pay the relevant share of inspection and repair costs.

Assistance provided to building owners

34. On assistance provided to building owners, BD, HKHS and URA have been operating various financial assistance schemes, in the form of grants and loans, to help building owners in need to maintain and repair their buildings. These schemes have evolved and are fine-tuned from time to time in the light of operational experience and feedback from building owners. As in early 2011, there were seven financial assistance schemes opened for applications by owners³.

35. While the five schemes funded and administrated by HKHS and URA shared a common objective to promote proper maintenance and repair of old buildings, there existed differences in eligibility criteria and forms of subsidy provided. In other words, buildings located in areas served by URA would obtain slightly different forms of assistance from those in areas served by HKHS. Also, if an owner applied for schemes administered by HKHS, URA and BD at the same time, the owner would have to fill in several sets of application forms and submit the same to three different organizations. A review was conducted with a view to streamlining and consolidating the arrangements and at the same time

³ The two schemes funded by the Government and administered by BD are: Comprehensive Building Safety Improvement Loan Scheme and Building Maintenance Grant Scheme for Elderly Owners. The five schemes funded and operated by HKHS and URA are: Building Maintenance Incentive Scheme, Building Management Incentive Scheme, Home Renovation Loan Scheme, Building Rehabilitation Materials Incentive Scheme, and Building Rehabilitation Loan Scheme.

exploring room for enhancing the terms and conditions of the various schemes for the benefit and convenience of building owners. After the review, HKHS and URA decided to adjust the terms and conditions of the five schemes and amalgamate them into IBMAS for all buildings in Hong Kong with effect from 1 April 2011. IBMAS has a set of unified application criteria and is co-managed by HKHS and URA to provide building owners with the following range of assistance through a single interface --

- (a) subsidy for formation of OCs;
- (b) grants/loans for works in common areas;
- (c) grants/loans for works in individual units; and
- (d) special assistance for individuals in need (e.g. elderly owner-occupiers).

36. In 2009, with the dual objective of enhancing building safety and creating jobs, the Government in collaboration with HKHS and URA launched a one-off Operation Building Bright ("OBB") to provide assistance for the maintenance and repair of dilapidated buildings aged 30 years or above. The original funding of OBB was \$1 billion of which \$700 million was contributed by the Government while HKHS and URA each contributing \$150 million. Subsequently, the Finance Committee ("FC") approved further allocation of funding for three times increasing the total Government funding to \$3.2 billion. The resultant total funding of OBB amounts to \$3.5 billion. OBB caters for the following two categories of target buildings, subject to meeting the prescribed eligibility criteria --

- (a) Category 1 covers buildings with OCs. OCs of eligible buildings may apply for joining OBB to carry out repair works on a voluntary basis; and
- (b) Category 2 covers buildings whose owners have difficulties in co-ordinating repair works, such as buildings without OCs. Depending on the circumstances, BD will issue statutory repair orders to such buildings to effect the necessary repair works. If the owners of the buildings are unwilling or unable to conduct repair works by themselves, BD will arrange consultants and contractors to carry out the works for the owners in default. However, if the owners or OCs of the

buildings are willing to organize repair works voluntarily, they could follow the approach for Category 1 target buildings to carry out repair works.

37. While acknowledging that building owners have the responsibility to properly maintain their buildings and carry out repairs, the Subcommittee considered that enhancing both technical and financial support to building owners, especially those of dilapidated buildings and elderly owners, were equally important to improve building safety in Hong Kong. Regarding the financial support to building owners, the Subcommittee was briefed on the amalgamation of the five financial assistance schemes into IBMAS at the meeting on 11 May 2011. The Administration also updated the Subcommittee on the latest progress of the implementation of OBB at the meeting on 11 June 2012.

38. Subcommittee members welcomed the consolidation of the financial schemes to become the single scheme of IBMAS for all buildings so as to provide "one-stop service" and greater convenience to OCs and building owners. Members also appreciated the relaxation on the eligibility criteria, and enhancement in subsidies to owners such as extension of the repayment period for interest-free loans for works in individual units to 60 months. In view of the increasing property prices, there were views from some members that regular review should be conducted on the eligibility criteria setting the rateable value at \$100,000 per annum for unit in urban areas and \$76,000 for unit in the New Territories. According to HKHS, the per annum rateable values of \$76,000 and \$100,000 were introduced in the third quarter of 2008, and it would conduct a new round of review based on the latest rateable values provided by the Rating and Valuation Department. The Subcommittee noted that upon the completion of the review, HKHS and URA increased the maximum rateable values by around 20% in April 2012. Some members also suggested that BD should consider offering interest-free loans for building owners in line with other assistance schemes. The Administration advised that it was an established policy for the Government to impose interests for all kinds of loans. Nonetheless, owners with genuine difficulties could apply for exemption of loan interests.

39. On the technical support and information services provided by URA to enhance building safety, members supported setting up more Urban Renewal Resources Centres ("URRCs") to promote, educate and provide services to OCs and building owners on rehabilitation of their buildings and redevelopment matters. URA advised that a number of URRCs would be

set up in different areas in Hong Kong. The Subcommittee noted that the first URRC located in Tai Kok Tsui was opened in April 2012. The Centre comprises three storeys with a total area of 10 000 square feet. The Centre provides technical support to owners/OCs on building rehabilitation and repair matters. Facilities such as meeting rooms, a mediation centre and a multi-purpose assembly room for briefings and urban renewal related activities are provided in the Centre.

40. On the progress of OBB, Subcommittee members noted that up to 30 April 2012, a total of 3 151 target buildings were included for assistance under OBB. Among these, 789 buildings had completed repair works, 797 buildings had repair works underway, and works for another 1 043 buildings with approvals in principle granted would commence upon completion of the procurement procedures. Moreover, OBB had helped create 30 555 jobs. Based on the Administration's latest estimation, after completion of repair works for all of the above 3 151 buildings, there will be around \$400 million of uncommitted funds available out of the \$3.5 billion for further deployment to assist some more Category 2 target buildings to carry out repair works.

Manpower resources in the Buildings Department

Re-organization of the Buildings Department for implementation of package of measures to enhance building safety

41. To dovetail the implementation of the new multi-pronged approach, the Administration provided additional staffing resource at the non-directorate level to BD. The Administration also considers that BD, as the main implementation agent for the new package of measures to enhance building safety, needs to strengthen and rationalize its existing directorate establishment and streamline the overall departmental structure to optimize the utilization of available resources. Major proposals of the re-organization plan include the creation of a supernumerary Assistant Director post for providing directorate steer on the implementation of the MBIS and MWIS, the creation of a permanent Chief Building Surveyor ("CBS")/Chief Structural Engineer ("CSE") post for overseeing the implementation of MWCS and the Signboard Control System, revision and realignment of duties and responsibilities among other directorate posts, adoption of the "Building Co-ordinators" approach, establishment of new Mandatory Building Inspection Division and re-organization of Support Division to establish Corporate Services Division. The organization charts of BD before and after the re-organization are given in **Appendices IV and V**.

42. The Subcommittee was consulted on the re-organization plan at the meeting on 11 May 2011. Members generally supported the staffing proposal. Some members opined that the task of tackling sub-division of flat units should be taken up by both BSs and SEs. Ir Dr Raymond HO also expressed concern on the proposed creation of the permanent CBS/CSE post to be offset by the deletion of a permanent CSE post, and suggested that the CBS posts for the Slope Safety and Fire Safety Sections should be turned into a bi-disciplinary post of BS/SE. He further stressed the need for BD to address the longstanding conflicts between SE and BS grades in the Department. The Administration advised that the re-organization proposal had gone through extensive staff consultation. It considered that the professional knowledge and competence of SE and BS would complement each other and the Administration was determined to move towards opening up the directorate posts for staff with proven professional competence and leadership. With the injection of additional resources, it was believed that the two professional grades should perform their responsibilities in an open and considerate manner, respecting the other grade and working as a team to meet the new challenges faced by BD.

43. Subcommittee members welcomed the new "Building Co-ordinators" approach on its benefits in improving efficiency in BD's day-to-day operation and providing greater convenience to buildings owners and OC. As compared with the existing arrangement where specific UBWs and statutory orders were undertaken by individual special task sections of BD which might cause confusion to building owners, the new approach would solve the problem by designating a single section to handle all building safety problems of a building so that owners would only need to liaise with one single contact point in BD for all building safety issues/complaints concerning their buildings. On the work of the building co-ordinators, some members suggested that they should assist in tackling water seepage and fire safety problems in a building, as well as enhancing slope safety. The Administration explained that building co-ordinators would deal with all safety related issues in the building within the ambit of BO. Complaints on water seepage problem were handled by the Joint Office set up jointly by BD and the Food and Environmental Hygiene Department ("FEHD"), and upgrading of fire safety measures in private buildings was governed by a separate legislation. Nonetheless, building co-ordinators would maintain good communication with other divisions within BD and other Government departments including FEHD and the Fire Services Department in resolving related problems.

44. The Subcommittee further considered that apart from enhancing manpower at directorate level, the Administration should also provide adequate manpower support at the frontline level. Members welcomed the creation of 176 non-directorate civil service posts in BD in 2011-2012 representing a substantial increase of 18% in its establishment to cope with the increased workload. Members noted that staffing proposals relating to directorate posts in BD's re-organization plan was considered by the Establishment Subcommittee ("ESC") at its meeting on 6 June 2011 and approved by FC on 24 June 2011.

Manpower to strengthen enforcement against unauthorized building works in New Territories exempted houses

45. UBW problems found in New Territories exempted houses (generally referred to as "NT village houses")⁴ aroused grave public concern in April 2011. In June 2011, the Administration briefed the Panel on the proposal to enhance enforcement strategy against UBWs in NT village houses. On the fundamental premise of ensuring building and public safety and complying with the law, UBWs in NT village houses would be tackled through categorization for management and prioritization for progressive enforcement. Under the new strategy, BD would accord priority in taking enforcement against UBWs in village houses constituting serious breach of the law and posing higher potential risks to building and public safety even though they did not pose imminent danger. To curb the emergence of new UBWs and to safeguard the structural safety of village houses, the Administration would introduce a reporting scheme for owners of NT village houses to report within six months those existing UBWs which constituted relatively less serious breach of the law and posed lower potential risks. The owners would be required to appoint qualified persons to conduct safety inspection and certification of the structures concerned every five years. Certain specified existing and new green and amenity facilities in NT village houses would be allowed without the need for obtaining permission from the Lands Department or BD. The new strategy took effect on 1 April 2012.

46. To take forward the new strategy, the Administration proposed to establish a new Village Houses Section ("VH Section") in BD comprising some 40 non-directorate staff and create a supernumerary bi-disciplinary post of CBS/CSE for 10 years to head the new Section. The

⁴ Subject to meeting the specifications stipulated in the Buildings Ordinance (Application to the New Territories) Ordinance, building of NT village houses are exempted from certain provisions of BO and the regulations made under the Ordinance. However, as far as control of UBWs is concerned, they are subject to the regulation of BO.

Subcommittee discussed the Administration's preparations for the new strategy and the related staffing proposal at the meeting on 8 December 2011.

47. Subcommittee members supported the staffing proposal in general. They noted that the Survey Officer Working Group and the Technical Officer Working Group in BD had expressed concerns about the setting up of VH Section and the staff deployment, and requested BD to improve manpower support at the frontline level instead of contracting out its work to outside consultants. While BD's Local Building Surveyors' Association supported the proposal, it considered that the bi-disciplinary directorate post should be filled by a CBS. In view of the concerns expressed by staff associations, the Subcommittee urged the Administration to conduct further consultation with the concerned staff associations and address their concerns. The Administration later reported that it had further explained the proposal to concerned staff associations and addressed their concerns at a meeting on 16 December 2011. The new VH Section would comprise all the four departmental grades (i.e. BS, SE, Survey Officer and Technical Officer) and the ratio between the two professional grades and the two technical grades would broadly be 1:1. The BD management assured staff representatives that their views and concerns had been carefully noted, and there would be continued dialogue with the staff with a view to enhancing communication. As regards the concern about outsourced consultancies, the Administration explained that it was necessary to engage outside consultants to handle project based tasks which were time-limited in nature and provide a rapid response to reports on UBWs under construction. The Administration would ensure the best use of resources when deciding the right mix of civil servants and outsourced consultants in discharging the tasks. It had put in place monitoring system to ensure effective management and performance of the consultants. The Subcommittee noted that staffing proposal for the new VH Section was considered by ESC at its meeting on 15 February 2012 and approved by FC on 20 April 2012.

48. On the implementation of the enhanced enforcement strategy against UBWs in NT village house, subcommittee members considered it essential for the Administration to draw up specific targets and build up a database on UBWs to facilitate enforcement and assess the effectiveness of the strategy. They also stressed the importance to deal with UBWs in urban areas and NT village houses on equal footing to ensure fairness to all. Anticipating likely resistance of the indigenous villagers, members suggested that the Administration should engage social workers to help the work of VH Section including coordinating appropriate assistance for the

affected owners/tenants. Moreover, the Administration should devise measures to expedite the process of appeal cases by the Appeal Tribunal Panel to cope with likely increase in the number of appeal cases. The Administration advised that it was exploring ways to strengthen secretariat support for the Appeal Tribunal Panel and streamline the workflow. BD would seek assistance from other Government Departments in using information in their databases for speeding up the enforcement actions against UBWs in NT village houses and would explore the feasibility for engaging social service teams to assist in UBWs enforcement work.

Enforcement against unauthorized alteration works inside private residential and industrial premises

49. Building safety problems arising from unauthorized sub-division of flat units have caused widespread public concerns in recent years. The problems include overloading the buildings thus affecting the structural safety of buildings, water seepage caused by defective works in water pipes and drains, obstruction to fire exit routes, nuisance to the neighbourhood and unsatisfactory environmental hygiene, etc. Serious fires broke out in old buildings in mid-2011 and the one occurred at hawkers stalls in Fa Yuen Street in November 2011 which later spread to nearby buildings with sub-divided flat units have demonstrated the urgent need to tackle the problem of sub-divided flat units. On the other hand, there is increasing public concern about alteration of premises in industrial buildings for domestic purpose and the risk to occupants of sub-divided flats in industrial buildings. The clearance of UBWs in an industrial building in Larch Street, Tai Kok Tsui, involving 60 sub-divided domestic cubicles in March 2012 was a case in point.

50. The Subcommittee discussed with the Administration on the enforcement against unauthorized sub-divided domestic cubicles and alteration in industrial buildings to residential use as well as building safety-related issues in the fire at Fa Yuen Street at meetings in July 2010, December 2011 and May 2012.

51. According to the Administration, the associated building works in sub-divided flats usually involve the removal of the original non-structural partition walls, erection of new non-structural partition walls, installation of new toilets and/or kitchens, alteration or addition of internal drains for the additional toilets/kitchen, as well as the thickening of floor screeding to accommodate new/diverted pipes, etc. Internal drainage works within building units has been designated as minor work under MWCS.

52. Subcommittee members recognized that the problem of sub-divided flats involved complex social issues. Such flats served a useful housing function providing affordable accommodation to low income group who were not eligible for or were waitlisted for public rental housing but wished to live in urban area close to their place of work and/or to their children's place of stay. The Subcommittee supported the Government's policy that sub-divided flats were not to be eradicated but should be regulated to ensure their safety. Some members suggested that registered inspectors or qualified persons should report to BD if they discovered any unauthorized alteration works in private premises during an inspection under MBIS or MWIS. The Administration should require owners to register all interior alteration works, impose liability on respective property owners and works contractors should there be damages arising from the works, and set technical standards for works associated with sub-divided flat units. On public education, the Administration should enhance residents' awareness on the fire safety issues associated with sub-divided flats and promote co-operation from owners/residents which could help increase efficiency and effectiveness of the inspection work. It was also necessary for the Administration to improve the mechanism for handling complaints about sub-divided flats and strengthen assistance to OCs and building owners in tackling the problem. To tackle the problem of sub-divided flats at source, some members called on the Administration to expedite the provision of public rental housing to meet the pressing housing demand.

53. The Subcommittee supported the Administration to increase resources so as to enhance enforcement against sub-divided flats. Members noted that BD had commenced LSO against sub-divided flats since April 2011, and the annual target of buildings to be covered in such operations had increased from 150 buildings in 2011-2012 to 200 in 2012-2013. In response to the fire at Fa Yuen Street, BD had also adjusted its strategy for enforcement action by taking into account the fire risk that might arise from adjacent hawker stalls when choosing the target buildings by giving priority for enforcement to those buildings situated in the vicinity of hawker stalls and had double staircases. As a result, the number of target buildings in 2012 was increased to 370. Members noted BD's plan was to complete the inspection of this category of buildings by mid-2012.

54. On the enforcement against the use of industrial buildings for residential use, the Administration explained that BD would take action against the change in use of building (section 25 of BO) requiring the owners and/or the occupier to discontinue the unsuitable use of the building.

If UBWs are found in the industrial unit used for domestic use, BD would take action (section 24 of BO) in accordance with the established UBWs enforcement policy and procedures, including issuing statutory orders to require the owner to rectify the irregularities to ensure public safety. Subcommittee members expressed concern about the long time taken to take prosecution against industrial building owners for converting their premises to domestic use and urged the Administration to step up enforcement against non-compliance with discontinuation orders. In the light of high potential risks to occupants living in industrial buildings, BD had stepped up enforcement against the problem and extended the scope of LSO to include 30 industrial buildings suspected to have sub-divided flats. On the assistance for occupants of sub-divided flats in industrial buildings, members stressed the importance to provide them with assistance, including financial and re-housing arrangements.

55. To facilitate BD's enforcement against sub-divided flats, the Administration introduced the Buildings Legislation (Amendment) Bill 2011 in November 2011 to empower BD to apply for a Court warrant for entry to premises. The legislative proposal would enhance BD's capability in inspecting buildings with suspected sub-divided flats and building suspected to have internal UBWs. In addition, in May 2012, the Administration introduced amendments to the Buildings (Minor Works) (Amendment) Regulation 2012 to extend MWCS to include common building works associated with sub-divided flats so that the works would be carried out by prescribed registered contractors and, where necessary, designed and supervised by prescribed building professionals. In this way, building owners would be able to carry out small-scale building works including those for sub-divided flats in a lawful, simple, safe and convenient manner, which would significantly reduce the number of UBWs in need of enforcement. The following four new categories of minor works items are included in the Regulation which will come into operation in October 2012 --

- (a) creation of sub-divided flats with three or more rooms that are each provided with lavatories or other sanitary fitments;
- (b) installation of non-load bearing block walls in flats;
- (c) thickening of floors slabs in a flat using solid screeding; and
- (d) formation or alteration to door opening at the common parts including the escape staircases of buildings.

Seismic resistant design requirements for new buildings in Hong Kong

56. Hong Kong is not located geographically within active seismic belts and hence the possibility of serious earthquakes in the territory is relatively low. At present, the buildings in Hong Kong are not subject to any specific seismic-resistant design standards under the law but buildings were built with a load-resisting capacity to withstand strong winds as required by statute. According to a consultancy study commissioned by BD, while local buildings are basically safe in the event of an earthquake, introduction of seismic-resistant building design standards in Hong Kong would improve building safety standards and reduce damage costs, injuries and casualties due to earthquakes.

57. The Subcommittee discussed the Administration's proposal to consult the building industry and relevant stakeholders on whether statutory seismic-resistant design building standards should be introduced in Hong Kong at the meeting on 11 June 2012. Members enquired about the situations in overseas jurisdictions and implication on building costs. The Administration pointed out that many cities and economies around the world including Shanghai, South Korea, Thailand, New York City, Australia, France, Germany which were located in areas of seismicity comparable to that of Hong Kong, had all introduced statutory seismic-resistant design standards for new buildings. Moreover, the new Central Government Offices and the Legislative Council Complex at Tamar have adopted seismic-resistant building standards. The Government consultant estimated that the increase in construction costs would range from 0% to 0.3% assuming the adoption of the seismic-resistant design requirements of the United States' International Building Code 2006. If the Mainland's Code for Seismic Design of Building was used, the increase in construction cost would be 0.9%. The Administration considered that the increase in construction cost was not significant. In view of latest global trends, practices in other cities and relatively small cost implications, members in general supported the Administration's plan to consult relevant stakeholders on the proposal to bring in seismic-resistant building design standards in Hong Kong. Members opined that seminars on seismic-resistant building design standards should be organized for building professionals to share the views and experience with experts on the subject and urged the Administration to report the outcome to the Panel and allow sufficient time for Members to examine the finalized plan and relevant legislative proposals.

Way forward

58. At the meeting on 11 June 2012, the Subcommittee agreed that it would conclude its work and submit a report to the Panel.

Advice sought

59. Members of the Panel are invited to note the work of the Subcommittee.

Council Business Division 1
Legislative Council Secretariat
13 July 2012

Panel on Development

Subcommittee on Building Safety and Related Issues

Terms of reference

To study building safety enhancement and related issues.

Panel on Development

Subcommittee on Building Safety and Related Issues

Membership list

Chairman Prof Hon Patrick LAU Sau-shing, SBS, JP

Deputy Chairman Hon KAM Nai-wai, MH

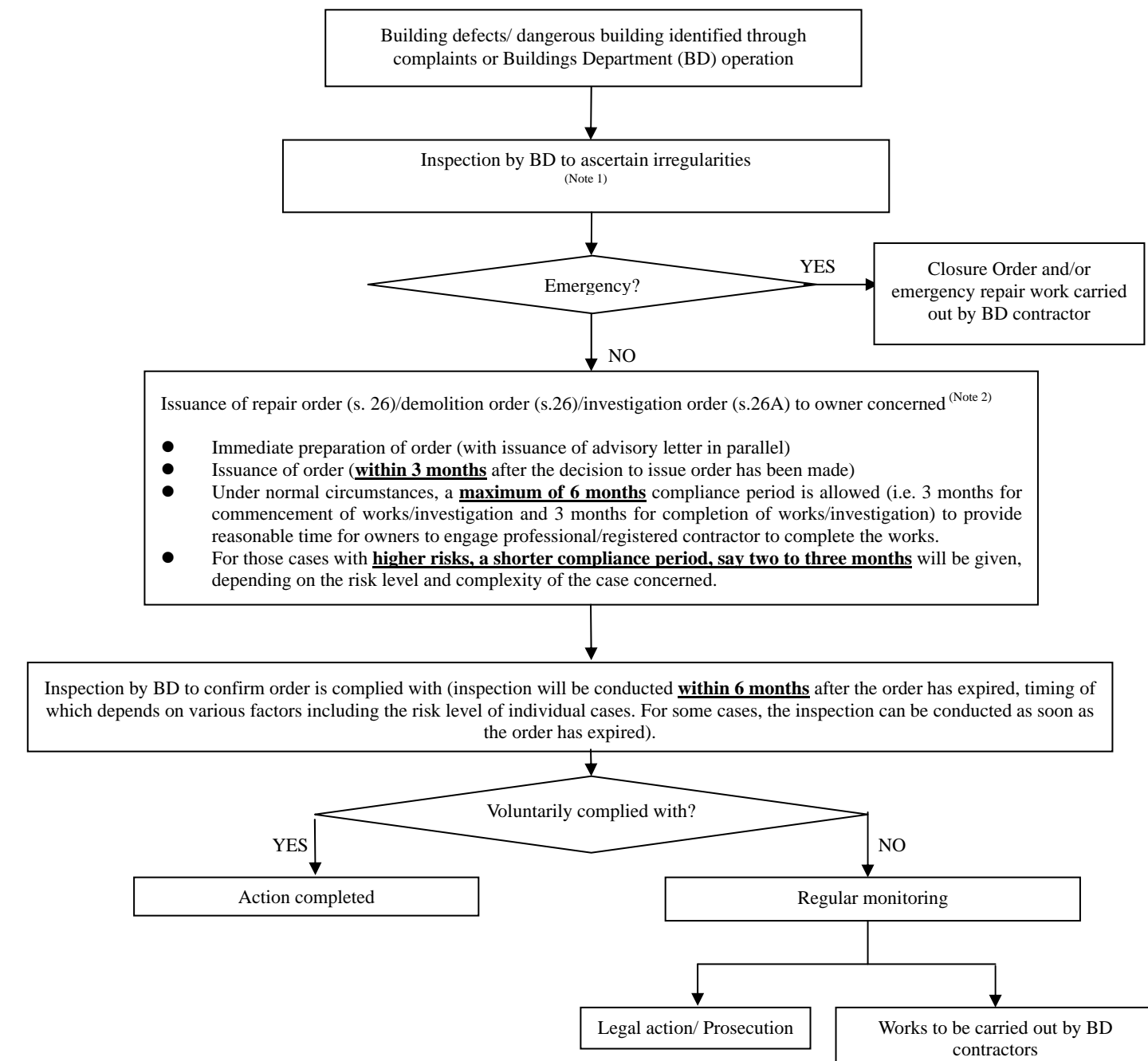
Members Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP
Hon James TO Kun-sun
Hon Mrs Sophie LEUNG LAU Yau-fun, GBS, JP
(up to 18 October 2011)
Hon Abraham SHEK Lai-him, SBS, JP
Hon LEE Wing-tat
Hon CHEUNG Hok-ming, GBS, JP
Hon Starry LEE Wai-king, JP
Dr Hon Priscilla LEUNG Mei-fun, JP
Hon IP Kwok-him, GBS, JP
Hon Mrs Regina IP LAU Suk-yee, GBS, JP
(up to 17 October 2010)
Hon Paul TSE Wai-chun, JP (since 17 October 2011)
Hon Alan LEONG Kah-kit, SC (since 18 October 2010)
Hon Tanya CHAN
(from 24 May to 20 October 2010)
(rejoined on 17 October 2011)

(Total: 13 members)

Clerk Ms Connie SZETO

Legal Adviser Miss Winnie LO

Flowchart for dealing with building defects/dangerous buildings



Note 1

Service Pledges

- (a) A 24-hour service for emergencies relating to buildings, building works, signboards and slopes
- during office hours

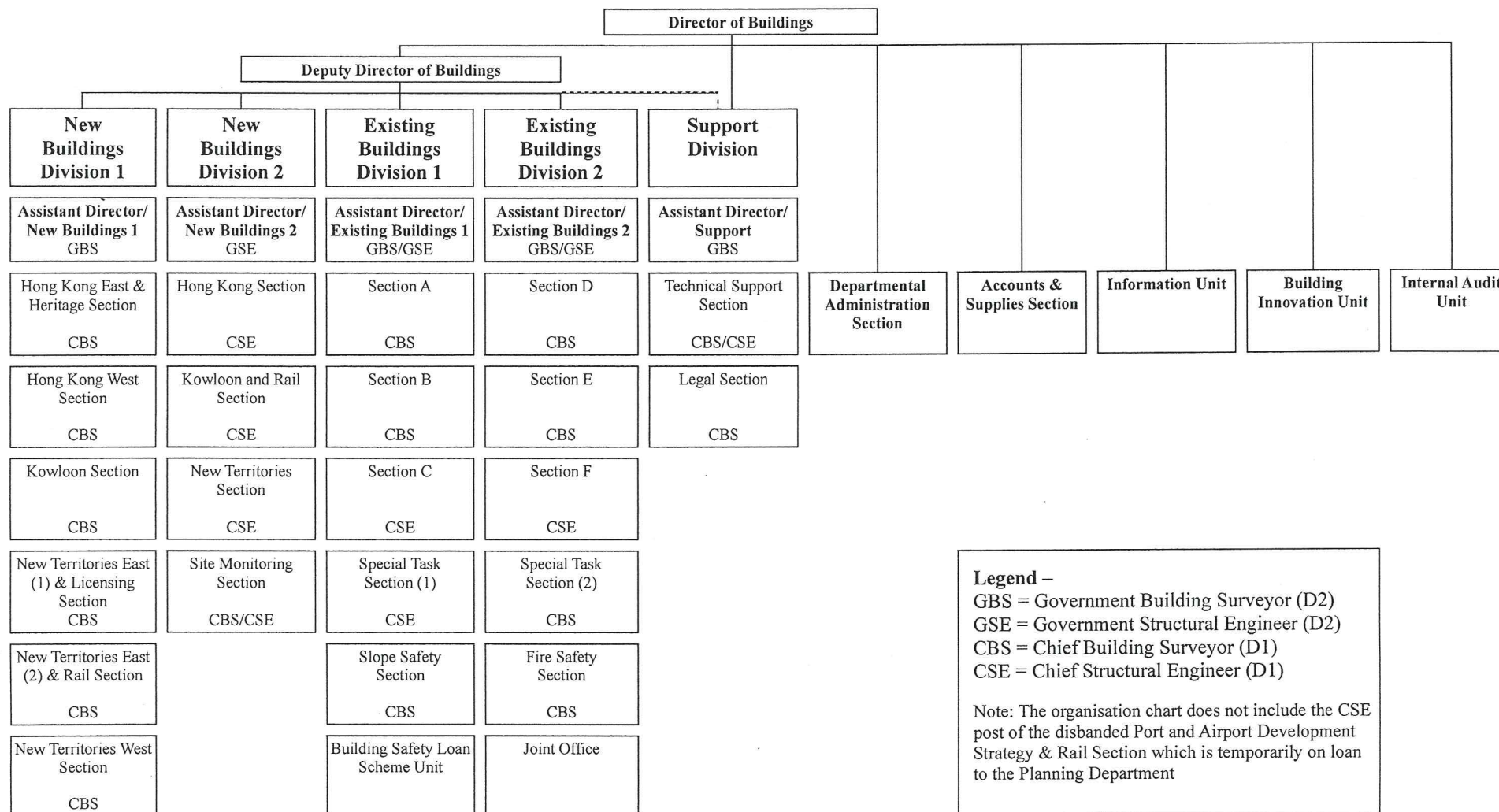
- in urban areas	Inspect within 1.5 hours
- in new town in NT	Inspect within 2 hours
- in other areas in NT	Inspect within 3 hours
 - outside office hours

- in urban areas & new towns in NT	Inspect within 2 hours
- in other areas in NT	Inspect within 3 hours
- (b) Non-emergency reports on dilapidation of buildings, signboards and slopes Inspect within 10 days

Note 2

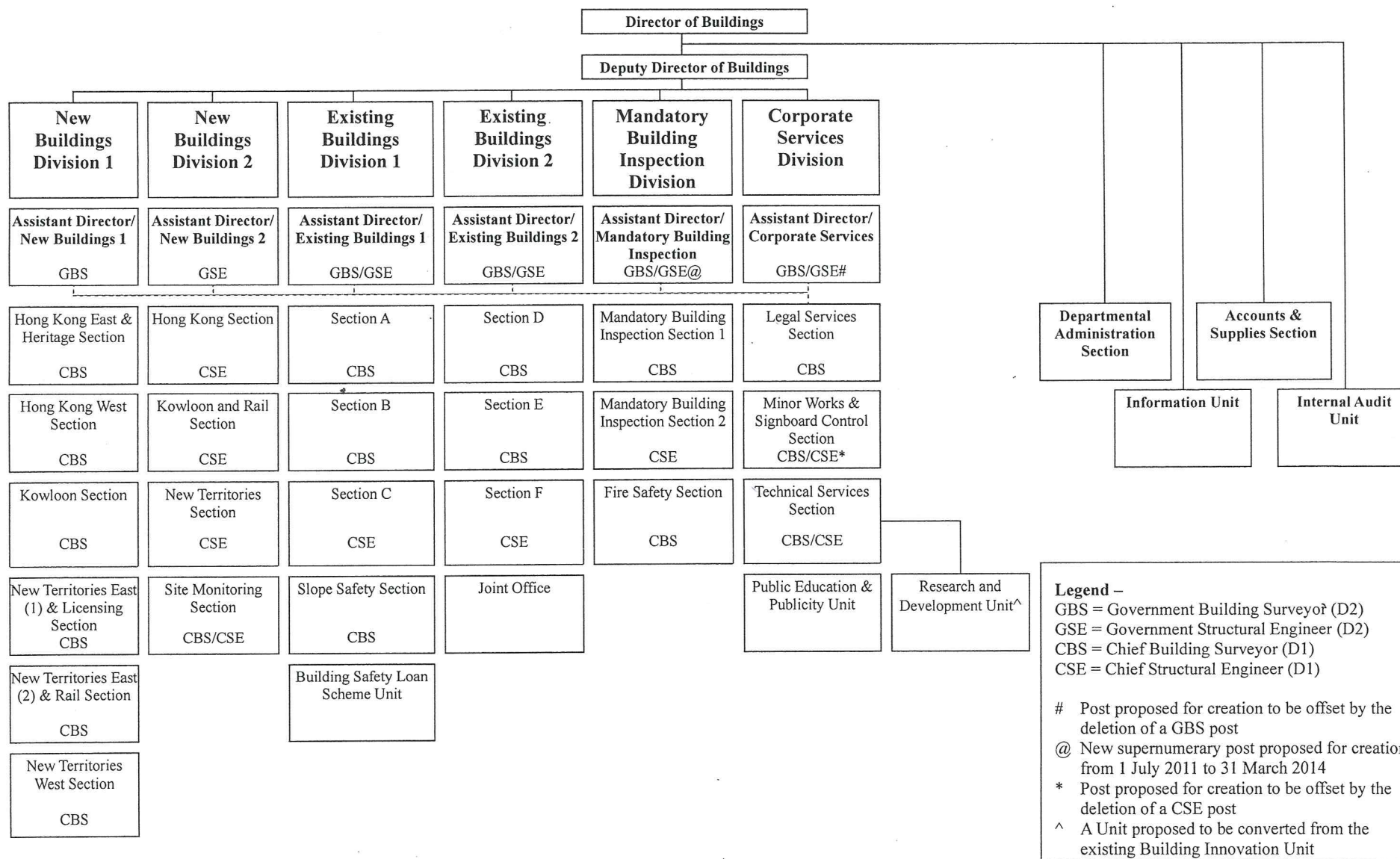
Owners could apply for various assistance schemes for subsidies and one-stop technical assistance, including the Operation Building Bright and Integrated Building Maintenance Assistance Scheme, to assist them to comply with the statutory orders against their buildings through repair works (such as maintenance and investigation works in association with works in repair of building structure and external walls).

Existing Organisation Chart of Buildings Department



Source: Enclosure 1 to LC Paper No. CB(1)2087/10-11(01)

Proposed Organisation Chart of Buildings Department



Legend –
 GBS = Government Building Surveyor (D2)
 GSE = Government Structural Engineer (D2)
 CBS = Chief Building Surveyor (D1)
 CSE = Chief Structural Engineer (D1)

Post proposed for creation to be offset by the deletion of a GBS post
 @ New supernumerary post proposed for creation from 1 July 2011 to 31 March 2014
 * Post proposed for creation to be offset by the deletion of a CSE post
 ^ A Unit proposed to be converted from the existing Building Innovation Unit