The HKIE's 3rd Submission of Comments on URA Bill
Optimum Development Plan and Rehabilitation Issues in Urban Renewal

Introduction

1. The HKIE is pleased to note that at the URA Bills Committee meeting held on 3 April 2000, the Government representative has confirmed that it acknowledged the importance of rehabilitation of existing buildings and that when the Buildings Ordinance was amended to address this issue, the Government would consider delegating the relevant power to URA to deal with rehabilitation of old buildings in the designated urban renewal areas. We look forward to the early implementation of this concept and will be happy to contribute. (Ref. Points 2 & 7 of The HKIE's 2nd submission dated 29 March 2000).

2. We urge the Government to replace, in S6(1) of the Bill, the last word "development" by "development and rehabilitation of existing buildings". (Ref. Point 2 of The HKIE's 2nd Submission).

3. At the Bills Committee meeting on 3 April 2000, LegCo members were interested in more details about how to achieve optimum results by taking account of rehabilitation opportunities. The meeting also indicated that there will still various public concerns about the Board of URA and land resumption associated with urban renewal. We believe that our other proposals in the two earlier submissions will help resolve differences arising from these concerns.

4. In this submission, we will present an outline of our proposed approach for preparing urban renewal master plan and the detailed plan for individual areas. This new approach is the result of elaborating and integrating the relevant parts of our earlier proposals. It will be explained how the new approach addresses the two points mentioned above. We will also elaborate further our views on rehabilitation of buildings.

Urban Renewal should be a stimulant for progress

5. Urban renewal should be a continuous process of adapting the existing urban areas to satisfy changing societal needs. This process is sustainable only if it is economically viable and technologically feasible. Increasing the plot ratio in the redevelopment of individual sites is useful as an interim measure but cannot be relied upon as a long-term means of financial support for urban renewal.

6. The urban renewal process can and should assist and spur progress through stimulating economic growth and technological advancement. It is important that the standards to be adopted for the urban renewal process must be affordable and acceptable to the community as a whole, and that the policy and executive actions will encourage the development of the relevant engineering technology. Only economic growth will enable new higher standards on environment and social welfare to be realistic. Only technological advancement will provide new better solutions.

Outline of the Proposed Participatory Deductive Approach

7. Our proposed approach is to design the master plan by starting from a set of general requirements which are to be agreed with all major or representative stakeholders before formulating the master plan. The master plan is to set out the optimum land use mix and the approximate size of redevelopment zone for each of the proposed urban renewal areas. It will also identify major improvement to transport links or new one between the different areas. Detailed plan for each project is to be developed from the master plan by using preseribed principles to address site-specific factors.

8. This participatory, deductive approach will speed up the decision process as standards and principles are agreed beforehand. Major issues are addressed by logical deduction from the agreed standards and principles in contrast to the usual practice of inviting comments after plans are formulated.

Preparation of Master Plan

9. In our proposed approach, general requirements on urban renewal projects are to be derived from assessment criteria on environmental and social impacts. These requirements would be set as standards on such factors as the minimum land area to be set aside in each development project for open space, community facilities and any other specified uses, the acceptable transport service level (e.g. the traffic volume to capacity ratio of roads not to exceed certain value), minimum distance of separation between residential and industrial uses, (or indeed any other land use compatibility criteria), maximum number of residents and employees affected by statutory land resumption, together with any other specific requirements of or as agreed with Government departments (e.g. compensation criteria).

10. These initial standards would be used to derive the optimum land use mix for each of the proposed urban renewal areas by minimising the net societal cost. This problem is analogous to the derivation of Hong Kong's Territorial Development Strategy (TDS). The Land Use Transport Optimisation (LUTO) model was used to solve the problem. The same methodology can be used in the proposed approach for urban renewal planning. A similar approach was used in the several subsequent reviews of TDS.

11. The net societal cost is defined as the sum total of all costs incurred by the entire community less all community benefits as a result of implementing the master plan. Costs and benefits include items such as demolition and construction of buildings, roads, drains, etc; relocation of homes and jobs; loss of building land, enhanced land value, etc. Depending on the monetary value which the community will pay for each of the social costs, the net societal cost can be a net benefit.

12. The net societal cost of the optimum master plan is what the community collectively must be prepared to pay for implementing the plan. The net societal cost depends on the standards to be adopted.

13. The net societal cost therefore provides the rational basis for adjusting the standards so that the corresponding optimum master plan is within the economic means of Hong Kong as a whole. LegCo and the public will have a quantitative basis to consider the appropriate standards relative to the social values and having regard to economic reality.

14. The above derivation process will produce the costs and benefits of each urban renewal area. The enhancement of land value of all land lots which will result from the urban renewal proposals can also be assessed. The Government and URA will thus have a realistic basis to consider the distribution of urban renewal benefits and to assess the relative priority of individual areas in the preparation of implementation plan.

Preparation of Detailed Development Plan for Individual Area

15. The master plan derived from the above procedure provides the framework within which the local issues and individual lot can be considered with due regard to the global effect. The procedure for preparing detailed development plan for each proposed urban renewal area can be set out systematically as the following 4 steps:-

    a) From the arterial transport links identified in the master plan, the layout of the new road (or rail segments within the proposed urban renewal area) is designed. The layout is largely controlled by considerations external to each area.

    b) The local road layout in each area is then designed taking into account the existing road pattern. The criterion is to minimise change in the building lot boundaries. Special land use requirements e.g. requiring separation from residential uses will be taken into consideration in this step.

    c) Land use of the remaining street blocks resulting from the road layout will be designated according to the optimum land use mix derived from the master plan. The criterion is to minimise change of land use from the existing situation.

    d) The road layout and land use plan derived from b) and c) above is refined by site-specific considerations. In particular, likely controversial cases of resumption or change of land use can be assessed by reference to the effect on net societal cost if the proposed action on the lot in question is not taken.

16. The above systematic procedure will enable the Government and URA to be more transparent as decisions are made with quantitative information and if necessary on a site by site basis, on rehabilitation or redevelopment, on statutory resumption or leaving it to the lot owner, and on the time limit for such actions. Any opportunity for simplifying administrative procedures can also be more easily identified in conjunction with the above systematic procedure and analysis results.

17. Lot owners and tenants (including small businesses) affected by Government or URA action whether favourably or adversely, will have a firm basis to comment on proposals and suggest amendments. Professionals will be able to produce better and quicker solutions both from the societal and their clients' viewpoints.

Addressing Public Concerns over Resumption and Compensation

18. The above participatory deductive approach will also remove several major public concerns reflected in recent comments on the URA Bill. These comments relate to whether the Chairman of URA Board should be a non-executive member of URA (and hence not to be the same person as the Chief Executive as provided in the Bill), whether the provisions on public accountability are sufficient, and whether the objection procedure, appeal mechanism and the scope and level of compensation and payments are adequate. There are also suggestions on participation at the district level, social impact assessment, and balancing efficiency and individual's rights.

19. In our view, these reflect concerns arising from the public's fear of URA's infringing on private citizen's rights and the lack of a clear definition of "public interest" for which Government would exercise the power of resumption to expedite urban renewal action. Adoption of our proposed approach will remove most of such concerns for the following reasons:-

    a) Acceptable levels of social and environmental impact are agreed at the outset.
    b) A site will not be included in the urban renewal plan unless the societal benefit outweighs the cost, in quantified terms.
    c) The urban renewal master plan will bring about maximum possible net benefit to the community.
    d) Thus it would be immaterial whether the Chairman of URA Board is a non-executive member or an executive director.
    e) There will be adequate resources and justifications to pay the proposed compensation and other payments.
    f) The adverse and beneficial effects on different lots are estimated before urban renewal action.
    g) All major planning and implementation principles together with relevant information and data used in the decision process can be made available to the public systematically.
    h) There should thus be little concern on public accountability.
    i) Objections, appeals and compensation terms can be discussed amongst the concerned parties objectively.
    j) Government has a basis to consider whether and how to recover the urban renewal benefits accruable to lot adjacent to but not physically affected by urban renewal works.

Rehabilitation Issues

20. From the long-term high-level perspective, our proposed approach will help achieve the very important goal of continuous improvement in the urban renewal

process. The open and objective way of analysis and design together with the systematic availability of information and data will stimulate and facilitate building professionals and academies to advance the art and science of urban renewal, thus fostering progress on a broad front. One particularly important aspect is the rehabilitation of existing buildings.

21. Rehabilitation of old buildings is extremely important both economically and socially. Consider a typical old building of say 12 storeys with 8 flats per floor. Redevelopment will imply relocation of 400 people and re-construction cost of $100M for each typical old building. Therefore we advocate as a general rule, that the relative priority of alternative actions be rehabilitation, partial reconstruction and redevelopment.

22. Rehabilitation and partial reconstruction depends critically on ensuring structural safety, feasibility of alterations to serve new use, and systematic maintenance to ensure satisfactory functional performance of the rehabilitated building for the desired use. New engineering technology has to be developed to fulfil these requirements on a large scale.

23. The Government has been studying a new code of practice for the safety investigation, assessment and repair of existing buildings with particular reference to the adequacy of structural strength, safety of external finishes, and integrity of fire escapes. It is yet to develop new technical guidelines for alternation and addition to existing buildings or for the design of new buildings which will have better chance of meeting requirements of changing use within the serviceable life of the building.

Essential New Engineering Technology

24. Currently, the most important issue is the development of new technology to reduce the cost and time for investigating the structural strength of existing buildings. According to the results of recent Government survey of older post-war buildings, it can be considered that even for buildings of 40 years age or older, only less than one percent of such buildings is likely to contain structural components where structural strength may not be up to the desirable level. Yet, if failure occurs, the consequences are often extremely serious. The difficulty lies in detecting the few defective members out of a large number of buildings. Current methods are not suitable for carrying out investigation of a large number of buildings. Yet every year, several hundreds of buildings enter the 40-year-old category.

25. The engineering profession is working on a better solution to this fundamental problem. In addition, new structural repair technologies using new as well as conventional materials are being studied for application on a large scale. By structural repair, we mean restoring the original performance level, rather than insisting on restoration to the original design. We urge the Government to facilitate and assist the development of these new technologies, e.g. by reviewing the present form and procedure of control of existing buildings and by providing financial assistance where needed, such as under the Innovation and Technology Fund.

26. We understand that the Government has been carrying out studies with a view to setting optimum standards and more appropriate regulations on the lighting, ventilation and fire safety of buildings. The study results can also be used as the starting point for a new approach to the rehabilitation and maintenance of existing buildings to serve new uses on a large scale. We urge the Government to make available the above study results to all professionals and use the urban renewal opportunities to stimulate progress of the new approach to rehabilitation and assist all building-related professionals to develop the necessary technology and skill.

Conclusion

27. Responding to LegCo members' enquiry, we have presented an outline of our proposed participatory deductive approach for preparing the urban renewal master plan and the development plan of individual areas. The open and objective analysis procedure of this approach will alley public concerns which would otherwise arise from the lack of a clear definition of the circumstances when private property and other citizen rights may be infringed upon by urban renewal works in the name of public interest. By separating values and techniques and by systematically presenting costs and benefits of alternative courses of action, consensus can be arrived at more easily both on global and local issues.

28. We therefore urge the Government to adopt the proposed approach for planning and implementing urban renewal works. Optimum coordination of land use and transportation is central to this approach. The LUTO methodology can be used for this purpose. It was developed for and was the basis for deriving Hong Kong's Territorial Development strategy. It should be emphasised that optimum utilisation of resources is essential for a sustainable urban renewal process.

29. Rehabilitation of existing buildings is the most important issue at the local level of the urban renewal process. Detection and repair of structural defect are currently the most pressing problem.

30. We urge the Government to make use of all available opportunities to facilitate and stimulate progress in the art and science of engineering and related professional practices during the urban renewal process.