THE HONG KONG HOUSING AUTHORITY

Memorandum for the Housing Authority Meeting

Addressing the Year 2000 Challenge

PURPOSE

This paper informs Members of our current progress in addressing the *Year 2000 Challenge* in the Housing Authority.

BACKGROUND

2.	The *Year 2000 Challenge* (Y2K) stems from a common practice of using only two digits[1] to represent and operate dates in computer programs. Computer programs so written will likely fail upon the turn of the century from Year 1999 to 2000. The Y2K problem not only affects computer programs or information systems but extend to a range of equipment and devices (e.g., elevators, telephone systems, devices related to building management, and security control). Such equipment and devices nowadays are embedded with computer microprocessors which may directly or indirectly have the two-digit date problem. Identifying what these systems and devices are, and how they interact or affect each other, has proved to be a very mamouth and urgent issue to address. The Year 2000 is an immovable deadline and the consequences of non-compliance are significant.

3.	Given the Authority's extensive property portfolio and the associated number of customers involved, the Authority has placed addressing the Y2K issue high on its agenda as reflected by the inclusion of the issue in the 1998/99 and 99/00 Corporate Plans. Consequently, the HA through the Housing Department, its executive arm, has taken early actions to assess and rectify Year 2000 related issues to minimise the risks of operations being affected, particularly those related to -

–	public health and safety
–	the provision of critical services to the public
–	payment and revenue collection

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[1] Only the year digits are used (i.e., "97" to represent 1997).

PROGRAMME MANAGEMENT

Y2K Steering Committee

4.   Management commitment and involvement are essential to ensure what the Y2K problem is addressed effectively. In this regard, the Housing Department Computer Committee (HDCC) which comprises the four Business Directors, Finance Director, Head, Corporate Strategy Unit and Director Corporate Services as Chairman has assumed the role of a Steering Committee to oversee the co-ordination, management and implementation of the strategy for Year 2000 compliance.

5.   It is recognised that the Y2K issue is not just a computer problem but a business issue and the compliance programme drawn up has taken due regard to this fact. The compliance programme includes identification and inventory taking of Information Technology (IT) application systems and non-IT embedded equipment/devices, conducting impact analysis and risk assessment to business operations, rectification and testing, contingency planning, confirming the compliance status of business partners and promoting general awareness of the *Year 2000 Challenge* to staff and customers. The HDCC meets monthly to monitor the progress of the implementation of the *compliance programme* and is supported by a Working Group which assists in overseeing the compliance activities. The Housing Department Internal Audit Section has a representative sitting on the Working Group.

6.   The Department also reports to the HA Finance Committee the progress made in addressing the Year 2000 issue. In addition, we have reported to the Government on a monthly basis, from January 1999 to July 1999, the progress of our rectification work in HA/HD.

Quality Assurance

7.   We have built in quality assurance processes in the rectification of IT systems and embedded systems through the engagement of independent consultants, to assure the quality of the outputs.

CURRENT POSITION

Compliance Status

8.   There are a total of 73 IT systems, 2,571 embedded systems and

247 communication lines in use. Since end of June 1999, all "date-sensitive" IT and embedded systems/equipment, communication lines and office equipment have completed all necessary rectification actions towards achieving "Y2K readiness". All personal computers have been checked and rectified where necessary for compliance. Similarly, all office equipment which are identified as date sensitive have been checked and replaced if found to be non-compliant.

Awareness Programme

9.   It is crucial that staff and customers are made aware of the Y2K issue and what actions are being taken by the HA to address it. For staff, we have arranged seminars for, and issued newsletters to them to increase their awareness and understanding of the Year 2000 issue, how Y2K may affect their work and that they too have a part to play in compliance. These activities are being conducted in an on-going manner.

10.   For our customers, they would also want to be assured that the right steps are being taken by the Authority to ensure compliance. In June this year, we initiated an awareness campaign to inform them of our "Y2K compliance" status through posters, our corporate newsletters "HA Update," and the Estate Management Advisory Committee (EMAC) Newsletters. Since August, we have also been progressively briefing the EMACs. We will be launching another round of publicity programme in November about our "readiness" in combating the Y2K challenge. In particular, we will further alert our customers to understand correctly what Y2K issues are, the possible impacts on them, our "readiness" and contingency arrangement including telephone hotline and contact points in estates etc. through the distribution of posters, leaflets and notices.

Business Partners

11.   Rectifying HA's own IT and embedded systems alone will not be adequate in shielding the Authority against the Y2K problem if our service suppliers and providers have not addressed the problem as well. As part of our compliance programme, we have therefore been working closely with our business partners, (e.g., contractors, private management agents, banks) to ensure that they are taking actions to check and rectify date-sensitive items which may affect the services provided to us. This has been done through the conduct of briefings and seminars, in addition to seeking written confirmation of their compliance status. In assessing the responses, regard is taken to the criticality of the business partner to our business and consequently the need for further verification of their compliance status.

12.   As at end September 1999, 86 % of our business partners are Y2K ready and 7% are in the process of completing their rectification exercise by October. The remaining 7% have not yet responded. They include 24 (3 are active ones) consultants and 43 (34 are active ones) contractors. We have already issued warning letters to them. For those who cannot confirm their Y2K compliance by 9 October 1999, we will recommend to the Building Committee to suspend them from tendering until they have rectified their systems. Should non-compliance persist, further discipline action such as delisting from the respective Housing Authority Lists will be initiated.

Contingency Plan

13.   Despite having conducted a rectification exercise, it is still essential to have a contingency plan for unexpected situations during the century rollover.   Such a plan has been developed and covers pre-contingency preparations, contingency arrangements to be implemented in the event of a Y2K infection, and recovery of operations.   The Plan also sets out the command and control structure, logistics arrangements, internal/external communication channels, actions to be taken in response to degradation / loss of critical business services, etc.

14.   We tested the Plan in August. It was a useful exercise and a number of recommended improvements have made to the logistical arrangements in the Plan. These include strengthening the communication with our estate staff members, enhancing the Y2K Contingency Centre to allow more working space for the rollover date operation and more equipment such as the installation of sufficient telephone and fax lines etc. The Plan was also activated on the Year 2000 "critical date" of 9 September 1999. No adverse incidents on the operations of our systems occurred. We aim at conducting further tests in each of the eight management districts followed by another full rehearsal within the next two months to familiarize staff with the operations of the contingency arrangements as well as further refining the Plan based on additional experience.

Quality Reviews

15.   The rectification work on IT and embedded systems have been reviewed by third parties as part of the assurance programme. In addition, HD's Internal Audit Section has been monitoring the compliance work and reports on its observations to the Steering Committee on Management and Audit Studies which is chaired by the Director of Housing with the Business Directors as members. We also invited a team of representatives from Housing Bureau, ITBB, OFTA, EMSD and ITSD to visit us in June 1999 for a review of our progress. On the whole, the team considered our progress in order. The Audit Commission has also recently completed a review on our management of the Y2K compliance programme. The review concluded that the overall progress in achieving Y2K compliance is considered satisfactory. Several areas for attention were highlighted for further action and follow-up actions have been taken accordingly. These areas include reporting to the Government the progress of our re-developed systems ; where changes are unavoidable between now and end of the year, Y2K re-testing should be performed ; and that efforts should be continued on contingency planning.

RESOURCE IMPLICATIONS

16.   To date , we have spent about $37 million on the exercise. The major spending has been used to engage external service providers and consultants to assist in the rectification exercise. In addition to five dedicated in-house staff, all staff concerned, (amounting to about 97 man-year effort), are participating in the exercise as part of their normal duties.

INFORMATION

17.   This paper is for Members' information.

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File Ref. : HD/DP/7/30/2
Date   : 30 September 1999