

THE YEAR 2000 PROBLEM - "MILLENNIUM BUG"

INTRODUCTION

1. One of the most immediate and demanding challenges facing the Department and the HPSS is the need to secure effective solutions for all Year 2000 problems, otherwise known as the Millennium Bug. If not rectified, these could compromise the safety of patients and staff and the continuity of services. The following areas are particularly susceptible or directly affected:
 - a. medical equipment;
 - b. building and estates equipment (eg lifts, telephones, heating controls);
 - c. computer systems;
 - d. contingency and emergency (ie major incident) planning.

2. The HPSS and the Department have together been addressing the Year 2000 problem since 1996 and are confident that there will be solutions for all business critical equipment and services. Present targets are that all medical devices and estates equipment will be compliant by September 1999 and all mission-critical IM&T systems by June 1999. Resolution of the Year 2000 problem has been given the highest non-clinical priority in the HPSS.

YEAR 2000 PROGRAMME RISKS

3. However, there continues to be an element of risk in ensuring a satisfactory outcome to the Year 2000 compliance programme. Experts predict that, in spite of all efforts, something somewhere will go wrong. It is impossible to foresee all the exigencies that may arise and hopefully we will have contingency plans for those that do. There are presently concerns with the following :

NEED FOR SUPPORT OVER THE MILLENNIUM PERIOD

- **Major Utilities:** The Health Estates Agency, on behalf of the HPSS, is communicating with the Utility companies (Electricity, water, gas, etc) regarding Year 2000 readiness and the Central IT Unit (NI) is leading efforts on behalf of Departments to assess and advise on the readiness of key suppliers of services and utilities.
- **Suppliers:** It is possible that Year 2000 modifications already completed by external suppliers may not fix the problem satisfactorily and equipment may yet have to be modified further (or replaced), even at this late hour.
- **Staffing:** The HPSS compliance programme is dependent on the retention of highly-skilled and experienced staff in both the HPSS and the Department. Measures are being taken to try and retain staff, although a significant number have already left to join the private sector.

COST OF RESOLVING THE PROBLEM

4. At this stage, the total cost (including staff costs) of delivering the DHSS/HPSS Year 2000 work programmes is expected to be as follows:

	£
Core Department (IT & non-IT)	1,432,000
HPSS Regional IM&T	3,200,000
HPSS Boards, Trusts and Agencies (IM&T)	5,900,000
HPSS non-IT (Medical Devices, etc)	6,000,000
TOTAL	16,532,000

No additional funds have been made available to public bodies in the UK to address the Year 2000 problem.

NEED FOR SUPPORT OVER THE MILLENNIUM PERIOD

5. HPSS organisations are actively progressing plans for ensuring operational continuity into 2000. The dawn of the new millennium poses significant problems for the HPSS in terms of contingency and emergency planning. As well as the need for fall-back "business continuity" plans (should medical devices or other equipment fail) there is also a need to ensure that major incident plans will be able to cope with potential demands over the critical date-change period, and beyond. There are serious concerns about the celebration of the new millennium itself with a heightened potential for a major incident arising from the sheer scale of the celebrations, or the cumulative effect of a number of smaller incidents combining to overwhelm the HPSS response, or both. These possibilities are compounded by the length of the public holiday period which may last for 10 consecutive days (from 24 December '99 until 2 January '00) with consequent difficulties in ensuring adequate staffing cover. Although the primary focus relates to 1 January 2000, it is anticipated that there will be many "first in the new millennium" events throughout 2000 (and possibly 2001), which may continue to pressurise the emergency services. Many HPSS organisations are predicting the need for additional staff cover over the Millennium holiday period.

6. Within the Department, a Business Continuity Group has been established to co-ordinate the development of business continuity plans for the critical date-change period. First draft plans have been created, including an over-arching departmental plan, and these are being reviewed. They will also be updated to take on board the departmental re-organisation. Arrangements will require appropriate staff within the Department, particularly in the Health Estates Agency and the Directorate of Information Systems to be on duty over the whole two-week Millennium holiday period.

BACKGROUND TO THE YEAR 2000 PROBLEM

7. The Year 2000 problem could potentially have adverse effects on many computer systems and electronic equipment. The problem is that the year has often been represented by 2 digits rather than 4 so that computers, and computer chips built into other equipment, will process 00 as being 1900, not 2000. If such systems are not modified or replaced the consequences are unpredictable. Some systems, which calculate dates in advance, could be affected well before 1 January 2000.

CURRENT POSITION

8. The following is a summary of the current position:

The Department

The Core Department's three critical financial systems (Oracle Financials, DHSS Salaries Payroll Module and HPSS Superannuation System) will be compliant by the end of March 1999 and all other critical IT and non-IT (ie estate systems) work will be completed by the end of June 1999.

Health and Personal Social Services

Although guidance on Year 2000 issues is being provided by the Department, HPSS organisations are themselves responsible for Year 2000 compliance of all medical devices and estates and building equipment. The majority of HPSS organisations are indicating completion of compliance projects, including contingency planning, for all medical devices and estates and building equipment by the end of June 1999. Work-around solutions are necessary for critical equipment whose compliance status cannot be assured.

9. The Department's Directorate of Information Systems has responsibility for the majority of regional IM&T software systems and the management of a number of regional contracts with the private sector. Current estimates are that all

mission critical computer applications and systems will have been made compliant by June 1999 - see table at Annex 1. HPSS organisations are themselves responsible for local IM&T initiatives and networks, and for contingency planning. There are over 25,000 items of computer equipment in the HPSS.

10. HSS Boards have responsibility for assuring the operational continuity of all primary care services. GPs, dentists, opticians and pharmacists have been made aware of the Year 2000 problem and focused training for practitioners' staff is currently underway. The GP Fundholding scheme in Northern Ireland will continue until 1 April 2000 - one year longer than in England - and work is ongoing to identify and quantify the extent of any potential "Year 2000" problems associated with this local extension.

DHSS&PS/HPSS ARRANGEMENTS FOR YEAR 2000 MANAGEMENT

11. A Ministerial Group (Misc 4), which is chaired by the President of the Council and Leader of the House of Commons, the Rt Hon Margaret Beckett MP, currently has ultimate responsibility for co-ordinating UK action on the Millennium Bug problem. In Northern Ireland, Secretary of State has held regular progress meetings with the Permanent Secretaries. Rt Hon Adam Ingram MP represents Northern Ireland on Misc 4.
12. A Northern Ireland Millennium Infrastructure Forum, which reports to a Steering Group chaired by the Head of the Northern Ireland Civil Service (Mr John Semple) has also been established to assess the state of readiness of local infrastructure providers (oil, gas, water, electricity, health, police, ambulance, fire service, etc) and provide assurances to the public. The Northern Ireland Health Sector is represented on the Steering Group by representatives from the Department and the Health Estates Agency.

13. Overall co-ordination of Year 2000 progress in GB is carried out by the Central IT Unit (CITU), which reports directly to the Cabinet Office. Northern Ireland has its own body - CITU(NI) - which provides central co-ordination with GB.
14. A Departmental Board Year 2000 Sub-Committee provides corporate oversight of the overall DHSS&PS/HPSS Year 2000 programme. The current structure could continue post-Devolution, although some adjustment may be necessary to reflect the new Departmental structures.
15. The Department has established a taskforce to ensure consistency and co-ordination in relation to HPSS Year 2000 issues within the Department and to ensure that all issues which are relevant at Departmental level are picked up and actively taken forward by the right people.
16. The Chief Executive of each HPSS organisation has been made personally responsible for ensuring that his/her organisation and the services it provides will not be adversely affected by the impact of the Year 2000. Chief Executives of HSS Boards also have responsibility for ensuring the operational continuity of Primary Care.
17. An HPSS Year 2000 Directors' Forum has been established, involving HPSS staff at Director level with responsibility for Year 2000 in each HPSS organisation. Other groups have also been set up to address specific Year 2000 issues.

NATIONAL REPRESENTATION

18. The Department is represented on the UK NHS Year 2000 Advisory Committee and participates in a number of "Home Countries" Year 2000 fora. The Department of Health, Dublin, is also involved on a regular basis.

IMPACT OF NEW DEPARTMENTAL STRUCTURES

ANNEX 1

19. The Departmental IT Group and the Directorate of Information Systems will combine to form a new Information Services Division, which will continue the current Year 2000 responsibilities in respect of the Department and the HPSS.

20. The Health Estates Agency will continue to provide Year 2000 guidance and co-ordination regarding non-IT equipment compliance issues.

21. Interim arrangements will be put in place, at least until after the start of the new millennium, whereby

a. assistance will be provided by the DOE Information Systems Unit for those DOE Branches transferring to the new DHSS&PS; and

b. the Information Services Division continues to support IM&T in the Social Security and Child Support Agencies, which are transferring to the new DSD.

ANNEX 1

**Planned Compliance Dates For
Mission-critical IM&T Systems installed in HPSS Organisations**

NOTE: Apart from application systems marked *, which are believed to be compliant but are still undergoing testing, correction and testing of all the systems listed has been completed and the profile below refers to the implementation of systems throughout the HPSS.

25 March 1999

Application	Total	Done	Mar	Apr	May	Jun	Post-June
A&E	9		4	3	2		
Cervical Screening	5			5			
Clinical Information	8	5		2	1		
Labs - Regional	14	8	2	4			
Maternity	7	7					
Radiology	11	1	1	4	3	2	
Breast Screening	1				1		
Cancer Register	1			1			
Nurse Mgt (HBO)	1	1					
PAS	9	2		4	3		
Pharmacy	10	6	2			2	
Soscare	9	9					
*Child Health	4				4		
Protechnic Mental Health	3	2				1	
Budget profiling & reporting	19	17	1			1	
Central Payroll	1			1			
*Dental Payments	1			1			
Drugs & Poisons	5			3		2	
BACS for FPS	1			1			
HRMS	20				10	10	
LAPS	19	17	1			1	
*Prescription Pricing	1			1			
SIS Stock/non Stock	19	17	1			1	
SIS Warehouse	1	1					
Travelling Expenses	19	17	1			1	
Debtors Billing	19	17	1			1	
General Ledger	19	17	1			1	
*Community Health Index	1			1			
Belfast Link-Labs	1						Oct '99
Ambulance Control	1	1					
Blood Transfusion	2		2				
Medical Physics - Radiotherapy Planning	1	1					
TOTALS	242	146	17	31	24	23	1
Cumulative:-		146	163	194	218	241	242