

S.R.99/2

**MILLENNIUMCOUNTDOWN
YEAR2000COMPLIANCE
(MAY1999)**

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**A REPORT BY THE CONTROLLER OF AUDIT
TO THE ACCOUNTS COMMISSION IN TERMS OF
SECTION 102(2) OF THE LOCAL GOVERNMENT (SCOTLAND) ACT 1973**

**MILLENNIUM COUNTDOWN
YEAR 2000 COMPLIANCE
(MAY 1999)**

1. INTRODUCTION

- 1.1 Under arrangements established by Action 2000 various organisations will be reporting to the National Infrastructure Forum in July on the progress being made nationwide by the essential services in their preparations to achieve Year 2000 compliance.
- 1.2 To assist the Scottish Office to report on the position in Scottish councils the Accounts Commission has collected and evaluated information on all councils to assess the state of preparedness of each council. This report describes the nature of the work carried out and the key findings which emerged from the exercise.

2. NATURE OF WORK PERFORMED

- 2.1 Collection of factual information on each council was undertaken using a questionnaire prepared by the Controller of Audit's Office, similar to that used by the Audit Commission for councils in England and Wales, but with some limited modifications.
- 2.2 The questionnaire was designed to identify the organisational arrangements which councils have in place to address the Year 2000 issue and the progress they had made, as at the date of completion of the questionnaire, towards ensuring that their systems and equipment are Year 2000 compliant.

2.3 The questionnaire covered the following key areas:

- target dates for achieving compliance
- awareness of Year 2000 issues
- existence of a strategy and plan
- extent to which hardware and software affected has been identified and recorded
- use of risk assessment to identify priorities
- procurement practice
- testing strategy and progress achieved
- contingency planning

3. METHOD OF ASSESSMENT AND CLASSIFICATION

3.1 A questionnaire was completed for each of the 32 Scottish councils by the auditors in discussion with the relevant officers at each council. As part of the process auditors sought evidence from each council, on a selective basis, to support the council's responses to the questionnaire.

3.2 The information in the questionnaires was evaluated by the Controller of Audit's office to assess the state of the preparedness of each council applying the 'traffic light' model drawn up by Action 2000. Under this there are four separate categories. The relevance of each category is explained in the table below.

CATEGORY	DESCRIPTION
White	Unable to form assessment with present level of information.
Red	The assessment indicates that there is a severe risk of material disruption to infrastructure processes and that timely rectification may not be possible.
Amber	The assessment indicates that some risk of material disruption to infrastructure processes exists, but that there is an agreed containment plan to rectify shortcomings.
Blue	The assessment has not identified any risks of material disruption to the infrastructure process.

3.3 To assess performance a score was assigned to individual questionnaire responses. These were aggregated to give thresholds against which to evaluate overall performance. The following areas were given additional weighting in view of the importance which was deemed to attach to them:

- extent to which systems and equipment have been identified and included in inventories
- comprehensiveness of the range of systems and equipment included in the council's testing programme
- testing strategy and progress achieved at May 1999
- the deadline by which the council aims to have contingency plans in place.

3.4 For the purpose of categorising each council's performance two scoring thresholds were calculated; a lower threshold was fixed to indicate a 'red' classification and an upper threshold was fixed to indicate a 'blue' classification. Performance falling between the two thresholds was allocated an 'amber' classification. A red classification is generally indicative of inadequate performance across several of the eight key areas of the questionnaire.

3.5 The returns from all Councils were comprehensive and provided adequate information to evaluate each council's position. Consequently no councils have been classified as 'white'.

3.6 In the course of the exercise some auditors identified examples of good practice. These have been summarised and included as Appendix 2 to this report.

3.7 It is important to understand that the work undertaken by auditors and by the Controller's office:

- does not imply any responsibility on the part of either for ensuring that councils are Year 2000 compliant; that responsibility rests with the management of each council
- did not comprise any qualitative evaluation or technical appraisal of any individual system, item of equipment or process
- does not provide any assurance about the state of preparedness or the degree of compliance achieved by any council.

4. FINDINGS

- 4.1 All councils are strongly committed to achieving Year 2000 compliance and avoiding material disruption to services. This is reflected in the effort that is being put into addressing the problem across councils and in the progress which many have already achieved.
- 4.2 The definitive date by which councils need to achieve compliance is 31/12/99. About 2/3 of councils have set 30/9/99 as the target date by which they aim to be compliant but the remainder are working to later dates. This leaves them little margin for slippage in the event of difficulties being encountered.
- 4.3 Within most councils there is a high level of awareness of the Year 2000 issue. This is evident at Chief Executive level where there are regular report updates but less so in respect of other staff where around half the councils need to do more to keep staff informed.
- 4.4 All councils have drawn up a Year 2000 strategy and project plan which is being implemented using a project team. Progress is generally being reported on a regular basis. With one exception councils have estimated the impact of Year 2000 and are monitoring costs against budget. Some councils have identified the measures which they will require to take to retain key staff over the critical millennium period but several have not yet addressed this issue. These councils should now give priority to this issue.
- 4.5 The establishment of comprehensive inventories of critical systems and equipment is a pre-requisite to the preparation of a programme of testing. While virtually all councils had completed inventories for critical hardware and software less progress had been achieved in compiling inventories for equipment with embedded chips and for support and maintenance contracts. About one quarter of councils had still to complete inventories for the latter two categories. This work needs to be completed in early course to enable the potential scale of the problem to be identified and to enable plans to address it to be finalised.
- 4.6 All councils have used risk assessment to identify the systems which should receive priority attention and most have evaluated the possible consequences of systems failure and the probability and likely timing of such eventualities. The few councils which have still to do so should give this matter early attention.

- 4.7 Most councils took action some time ago to amend their purchasing specifications to take account of Year 2000 requirements and many of these have contacted suppliers whom they consider critical to their operations to determine how they are addressing the Year 2000 issue. However several councils have only made initial contact and have yet to receive responses.
- 4.8 The existence of a corporate testing strategy is fundamental to a sound testing regime. Some three quarters of councils have a strategy in place but 4 councils are still developing their strategy and a further 4 councils do not yet have a strategy. All councils should, by now, have a corporate testing strategy in place and the 8 councils referred to above need to address this as a matter of urgency.
- 4.9 Most councils plan to include equipment provided by third parties in their testing programme however 5 councils have made no such provision or plan to obtain assurance from other sources. Testing systems and equipment for compliance is demanding of resources. It is of concern, therefore, that 4 councils have still not assessed whether they have adequate resources to carry out this work.
- 4.10 The exercise underlying this report sought to establish the progress which councils had made in completing their testing programmes. Over half of all councils claimed to have already completed two thirds, or more, of their testing, 11 councils had completed 50% or less and, surprisingly, 2 councils had not yet completed any testing. It is clear that, generally, testing is more advanced in relation to IT systems and less so in relation to equipment with embedded chips. It is essential that those councils which are well advanced with their testing continue to give priority to this work and critical that those councils which are less well advanced, or who have not yet commenced testing, allocate the necessary resources to bring their progress up to the level of the most advanced authorities.
- 4.11 The need to have adequate contingency plans in place is well recognised by all councils and most have set 30/9/99 as the target date by which to have plans in place. However seven councils are operating to a later time scale. Most authorities are now meeting regularly with the utility suppliers, emergency services and neighbouring authorities but some councils have had no contact or only limited contact to date. While some councils have tested and updated their contingency plans the majority have still to do so. As part of their forward planning about half of all councils are in course of reaching agreement with their staff about working arrangements over the millennium period but the remainder are less well advanced, with some not planning to address this matter until the autumn.

4.12 A more detailed summary of the findings from the exercise is included as Appendix 1 to this report.

4.13 Classification of councils in accordance with the methodology discussed above, has produced the following overall results

Category	Number of Councils
White	Nil
Red	4
Amber	28
Blue	Nil

4.14 The classification allocated to individual councils is shown below.

COUNCIL	RED	AMBER	BLUE
1. Aberdeen		•	
2. Aberdeenshire		•	
3. Angus		•	
4. Argyll & Bute	•		
5. Clackmannanshire		•	
6. Comhairle na Eilean Siar	•		
7. Dumfries & Galloway		•	
8. Dundee		•	
9. East Ayrshire		•	
10. East Dunbartonshire	•		
11. East Lothian		•	
12. East Renfrewshire		•	
13. Edinburgh		•	
14. Falkirk		•	
15. Fife		•	
16. Glasgow		•	
17. Highland		•	
18. Inverclyde		•	
19. Midlothian		•	
20. Moray		•	
21. North Ayrshire		•	
22. North Lanarkshire		•	
23. Orkney Islands	•		
24. Perth & Kinross		•	
25. Renfrewshire		•	
26. Scottish Borders		•	
27. Shetland Islands		•	
28. South Ayrshire		•	
29. South Lanarkshire		•	
30. Stirling		•	
31. West Dunbartonshire		•	
32. West Lothian		•	

5. FOLLOW UP ACTION

- 5.1 All councils and their auditors have been advised of their assessment and, where appropriate, given feed - back on those areas on which they need to focus. Each council categorised as red will receive a visit over the course of the next few weeks from a joint COSLA /Accounts Commission team to discuss the action it proposes to take in order to address those areas where its performance is inadequate. It will be for individual authorities to ensure that the action taken is appropriate, sufficient and effective.
- 5.2 As part of the ongoing monitoring and assessment process all authorities will continue to complete self assessment questionnaires and submit copies of these to COSLA for scrutiny.
- 5.3 A further independent assessment will be carried out later in the year. All councils should ensure that they maintain the momentum of their work on Year 2000 with the objective of securing compliance well before the deadline date. As part of this process councils should continue to share information fully, both internally and, as appropriate, with other councils.



ROBERT W BLACK
Controller of Audit
25 June 1999

DETAILED SUMMARY OF FINDINGS

<i>Activity</i>	<i>Positive Achievements to date</i>	<i>Matters requiring Action</i>
Target Dates	22 councils have set 30/9/99 or earlier as the target date by which they aim to be fully compliant and to have effective contingency plans in place	10 councils are operating to a target date later than 30/9/99; this leaves little margin for slippage
Awareness	most councils are providing their Chief Executives with regular Year 2000 updates and 17 councils are reporting regularly to their staff	15 councils need to improve the level of awareness of their staff by regular reports
Project Formation	all councils have a Year 2000 strategy and project plan in place, are operating with a project team and are reporting progress against plan	
	31 councils have prepared a Year 2000 budget and most of these are monitoring costs against budget	one council has not prepared a budget to cover Year 2000 activity
	14 councils have identified the staff resources they will require to tackle the Year 2000 problem and the measures they will need to retain staff	9 councils have not yet identified their staff resource and retention needs and a further 9 are only at the stage of considering these requirements
Project Scope	31 councils have completed inventories of critical hardware and software and 23 councils also have prepared inventories for equipment with embedded chips and for support and maintenance contracts	one council has still to prepare inventories for its critical hardware and software and 9 have not completed the task for equipment with embedded chips or for support and maintenance contracts
	26 councils have contacted suppliers to establish the compliance status of their products; most of these councils have assessed suppliers' responses	5 councils have only partially completed this process and one council has still to commence
Prioritisation	all councils have identified systems which are to receive priority	2 councils have still to identify and prioritise equipment which is at risk

<i>Activity</i>	<i>Positive Achievements to date</i>	<i>Matters requiring Action</i>
Procurement Practice	29 councils have assessed the possible consequences of systems and equipment failure and most of these have evaluated the probability and likely timing of such failure	one council has not yet evaluated the consequences of systems failure and a further two have only covered IT systems
	27 councils have amended their purchasing specifications for all purchases to take account of Year 2000 requirements	5 councils have only amended their purchasing specifications for IT equipment
	19 councils have contacted and received information from suppliers whom it considers critical, to determine their Year 2000 preparations	12 councils have only made initial contact with suppliers and received few responses; one council has still to take action
Testing	24 councils have a corporate testing strategy in place	4 councils are still developing their testing strategy and a further 4 do not yet have a strategy
	27 councils have made provision in their testing plans for systems and equipment provided by third parties	5 councils have no plans or do not plan to test supplies from third parties
	28 councils involve users in the testing process for all critical systems	4 councils do not involve users in their testing, or only do so to a limited extent
	28 councils have assessed whether they have sufficient testing capacity	3 councils are still undertaking assessments and one council has not yet undertaken any assessment
	30 councils have included their key IT systems in their testing programme	2 councils have not included all key IT systems
	for a range of equipment with embedded chips approximately 70% thereof was included in councils' testing programmes	the remaining 30% of equipment with embedded chips needs to be included in testing programmes
	7 councils estimate that 66% of their testing is complete and 10 councils claim to have completed 75% of their testing	11 councils have completed between 33% - 50% of their testing, 2 councils 25% and 2 councils have not yet completed any testing

<i>Activity</i>	<i>Positive Achievements to date</i>	<i>Matters requiring Action</i>
Contingency Planning	<p>25 authorities aim to have identified risks and have contingency plans in place by 30/9/99</p> <p>approximately two thirds of authorities are meeting regularly with the utility suppliers, emergency services and neighbouring authorities as part of their contingency plans preparations</p> <p>to date 9 councils have tested their contingency plans and 6 of these have been updated following testing</p> <p>16 councils are in course of reaching agreement with their staff about working arrangements over the millennium period</p>	<p>7 authorities have a target date of 30/11/99 for this work</p> <p>the remaining authorities have had no contact or only limited contact with these organisations</p> <p>2 councils do not yet have contingency plans and 21 councils have not yet tested their plans</p> <p>10 councils have commenced discussions with staff about working arrangements and 6 are scheduled to commence in the autumn</p>

EXAMPLES OF GOOD PRACTICE

Dates

- The council is monitoring and reporting on any slippage as it is detected and contingency plans are being drafted

Awareness

- staff newsletter
- local press articles
- presentations to senior management and elected members

Project Formation

- staff from all service areas are involved with the project (as required); the team is multi disciplinary and involves representation from full - time and part - time staff
- the council recognised the need for a project manager at the outset of the planning process for Year 2000
- individual project plans are prepared including resource requirements; expenditure is monitored centrally

Project Scope

- new systems have compliance status defined at purchase
- inventories created for Year 2000 are now being used for other tasks; the retention and maintenance of these inventories beyond the Year 2000 project will be beneficial
- an independent audit is to be carried out to provide assurance that inventory information is accurate

Prioritisation

- the project team performed its work on the basis of criticality levels agreed with each service area
- risk summary by department is available on Intranet including a colour coding
- all critical systems were tested rather than taking assurance from suppliers

Procurement Practice

- a clause relating to purchase compliance is contained in the strategy document which was circulated widely
- corporate responsibility for incorporating Year 2000 compliance into new contracts was underlined by early guidance issued by the legal department
- a critical suppliers' database was set up early on in the project to which staff had access; the database has been continuously updated with information on suppliers, record of correspondence and compliance status

Testing

- there is a corporate testing strategy covering all service areas
- a strict change control procedure operates in the authority
- user acceptance sign - off is required for all systems
- the council pro-actively reviewed the resource requirement at an early stage to ensure that the majority of critical systems would be fully tested by April 1999

Contingency Planning

- a group to address cross organisational interfaces and issues was established
- contingency planning is an integral part of the emergency planning group
- some councils have decided to use each others test equipment / software to verify results obtained