Banishing the 'Y2K bug'

With a little bit of help from our friends

Australian Customs Service is working with major trading companies and brokers to ensure the Millennium Bug is beaten on Australia's trade and travel fronts. **Melanie Challis** *reports on progress in the lead-up to 2000.*

Customs is on schedule to complete thousands of tests and trials to ensure that the flow of goods and people across Australia's borders will not be adversely affected by the so-called Y2K problem.

But a successful final outcome will depend on assurance of similar levels of compliance among virtually all businesses involved in importing, exporting, international transport and travel.

Customs particular focus is the thousands of trading companies, customs brokers, couriers, freight forwarders and transporters which use Customs applications such as COMPILE, EXIT and EDIFICE.

More than 98 per cent of import documents are electronically lodged with Customs and more than 97 per cent of export declarations are cleared electronically. Growing numbers of international travellers are pre-cleared under the Advance Passenger Clearance system (20 per cent of 14.9 million passenger movements in 1997-98). These are impressive figures and Customs is determined that, as far as humanly possible, no one will be 'bitten' by the Millennium Bug.

Basically, the Y2K problem arises with computers and most machinery programmed to store dates with the year as two digits, such as '99', and which would be unable to recognise '00' as '2000'.

Customs is well advanced on a comprehensive program to ensure that all its own systems are 'Y2K ready'.

But, with our massive interfaces with thousands of manufacturing and trading companies, customs brokers, freight forwarders, shipping operators and airlines, it is vital that we know for certain that their information systems are compatible with ours on 1 January 2000 and afterwards.

Across Australia, members of Customs Year 2000 Project Team are contacting companies which use our computer systems to help ensure that they will be doing business as usual when 2000 comes around.

This has to be achieved by all those users ensuring that their systems are 'bug-free' and that they can continue to interact successfully with our systems, which we have been testing to ensure they are 'bug-free' also.

Customs Year 2000 preparations cover four broad categories:

● Customs systems, such as COMPILE, Edifice, Interim Edifice, Sea Cargo Automation, Air Cargo Automation, EXIT 1 and EXIT 2;

● network providers, such as AT&T, GEIS, Telstra and IBM;

● third-party software on users' systems; and

● users' hardware.

Assurance that everything is as it should be means the progressive and carefully timetabled inspection, evaluation, alteration where needed, and testing of millions of lines of computer code. The timetable for testing and verification is progressing well, but Customs is concerned that all the firms that should be taking part have the opportunity to do so.

Countdown to 2000

Phase 1, Code Check

Locating, assessing and making necessary changes to Customs applications to provide correct processing of dates after 1999.

This task was carried out by desk checking and manual correction of programs, and was completed in 1998.

Phase 2, Basic Test

Testing of work carried out in Phase 1. This was completed in 1998, and included Customs IT infrastructure (computer hardware and system software).

Phase 3, End-to-end Test

Simulated testing of functions between Customs and businesses was carried out using dates, such as 31 December 1999, 1 January 2000, and 29 February 2000 (2000 is a leap year). Other dates significant to particular processes were also tested. Phase 3 testing was the most rigorous and formed the basis for compliance certification. It included tests with major network providers such as Telstra and Tradegate.

Phase 3 testing began in October 1998 and was completed in May 1999.

Phase 4, External User Testing

The objective is to verify continuing compatibility between Customs and the business and government agencies that use its systems. Testing is constructed so that all parties can be satisfied that compatibility established before the year 2000 is retained.

Key dates for Phase 4 were:
June 7-11
June 21-25 (tentative)
July 19-23 (tentative)
Changes or extensions to these dates would depend on the number of enrolments.

Business users of Customs systems can contact Customs Year 2000 Project Team (Keith Sinderberry, 02 6275 5692 or keith.sinderberry@customs.gov.au)

The Customs contact for Phase 4 testing is Ada Polubinski (02 6275 6553 or ada.polubinski@customs.gov.au)

Information on Y2K issues at Customs is available on the Web at http://www.customs.gov.au

Fixing the Customs environment

The huge volume and complexity of computer interaction between Customs and business users imposes a requirement on everyone involved to ensure that all those interactions, and more, continue in 2000 just as they always have done.

Naturally, Customs has taken the lead role in ensuring that all goes to plan.

Testing of modifications to Customs main computer programs and applications finished in January 1999. In February, work concentrated on making all Y2K-compliant machinery and applications available for testing by external users, which began in March.

Customs will provide date compatibility by a technique known as windowing. This means that where data to or from Customs is specified in six-character date format (YYMMDD) or two-digit format (YY), a Customs software 'window' will assume that a year in the range 28 to 99 is 1928 to 1999. Similarly, 00 to 27 will be accepted as 2000 to 2027.

The way to ensure that this solution is compatible with our users is for them to carry out modifications to their systems, either by expanding the way years are recorded to four digits, or by similar windowing. Then, the best way to prove that it will work is to take part in one of our interactive test programs. (See *Countdown to 2000*, at left)

While Customs is well advanced in ensuring that its part in the processes will be ready in time, it cannot be responsible for the software provided to users to interface with our cargo facilitation systems. Customs has not sought assurances from software providers that their products will be Year 2000 compliant. That is the responsibility of their clients. Nevertheless, Customs has written to all known software suppliers emphasising the importance of compliance, and is strongly advising our users to ensure that their systems are compliant, with professional help if necessary.

As part of Phase 4 testing (see side panel *Countdown to 2000*), Customs is providing testing opportunities for providers of interfacing software. After scheduled Phase 4 testing is finished, these software houses will be contacting their clients regarding the tested status of their products.

But it is through our testing program, particularly External User Testing, by which everyone concerned can be sure that all will be well on 1 January 2000 and thereafter. The offer to provide testing facilities is open to all. We certainly hope that they will take advantage of it.

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