**COVAD**

ORIGINAL

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**VIA US MAIL**

Blanco S. Bayo, Director
Division of Records and Reporting
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

      **Re:    Year 2000**

Dear Ms. Bayo,

      Please find an original and 15 (fifteen) copies of Covad Communications Company's responses to the Florida Public Service Commission's requests for information regarding Year 2000 Compliance.

      If you should have any questions, please do no hesitate to contact me.

              Sincerely,

              Cindy N. Alaga
              Carrier Relations

Enclosures

AFA
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SEC   1
WAW
OTH   Melinda Butler

DOCUMENT NUMBER-DATE

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PSC-RECORDS/REPORTING

# COVAD'S Y2K READINESS DISCLOSURE

1.      **What is the status of your company's Year 2000 plans and preparations?**

*Covad was founded in October 1996 and launched its DSL services in December 1997. All of Covad's equipment and systems have been purchased or developed after December 1997. Consequently, Covad believes it is currently Year 2000 Compliant. Please see Covad's Year 2000 Strategy as Attachment A.*

2.      **What specific timetables and milestones have you identified to prepare for Year 2000?**

*Covad is in the process of preparing specific timetables and milestones for the implementation of its Year 2000 Plan.*

3.      **What is the status of the inventory phase of your company's Year 2000 preparations?**

*Please see Attachment B.*

4.      **What is the status of the assessment phase of your company's Year 2000 preparations?**

*Please see Attachment B.*

5.      **Which of your company's hardware and software systems, such as billing, administrative, customer service, infrastructure, and operational support systems, do you consider critical?**

*Please see attachment B.*

6.      **What is the status of the remediation, or renovation, phase of your company's Year 2000 preparations?**

*Covad is currently planning the testing of its systems, Covad will implement a plan for renovation if it is necessary., Covad was founded in October 1996 and launched its DSL services in December 1997. All equipment and systems have either been purchased or developed after 1997. Therefore, Covad does not anticipate that any of its equipment or systems will need to be renovated or replaced.*

7.      **What is the status of the testing phase of your company's Year 2000 preparations?**

*Covad is currently planning the testing of its systems.*

8. **Please describe your company's plans to address interoperability issues with other domestic carriers, such as LECs, IXCs, ALECs, CAPs, and wireless providers, and with interconnected networks and outside systems.**

*Covad's network is dependent upon the ILEC's underlying network. Covad is not aware of what steps the ILEC's have taken to make sure its systems are Year 2000 Compliant. However, Covad can manually interface with the ILECs if necessary.*

9. **What network inter-operability testing has your company conducted or will your company conduct? Is your company working with ATIS and NRIC to perform network interoperability tests?**

*Covad is currently planning the testing of its systems.*

10. **What is your company doing to avoid network failures that could arise due to non-compliant network providers? What safeguards are being taken? What communications channels have been opened with other network providers?**

*Covad is currently developing contingency plans in the event that non-complaint network providers systems fail.*

11. **Please describe your company's efforts to work with suppliers of your company's critical hardware and software systems to ensure that each supplier's equipment is Year 2000 compliant. Have you inventoried supplier and third-party products? Have you established compliance standards? What tests remain to be completed to verify that supplier's products are Year 2000 compliant, and when will they be completed? Please describe any contingency plans your company has developed to address the situation where a supplier's product is found to be non-compliant.**

*Covad was founded in October 1996 and launched its DSL services in December 1997. All of Covad's equipment and systems have been purchased or developed after December 1997. Consequently, Covad does not believe it will have any problems with unprepared outside vendors or suppliers. Covad has required its vendors, not including the ILECs to be Year 2000 Compliant, however, Covad has not independently verified the vendors information. Please see Attachment B for additional vendor information.*

12. What efforts is your company making to contact and educate critical customers to ensure that their telecommunications services and customer premises equipment are Year 2000 compliant. What tests are being conducted or can be conducted by a customer to test its equipment?

*Covad provides Year 2000 Compliance information to all customers whom request the information. Covad is currently planning the testing of its systems.*

13. What communications channels has your company established with the Department of Emergency Services' Emergency Operations Center? With other industries/companies that depend on your company's services?

*Covad is a DSL service provider and launched its services in December 1997. All of Covad's equipment and systems have been purchased or developed after December 1997. Consequently, Covad does not anticipate the need to establish communication channels with the Department of Emergency Services.*

14. Please describe your company's contingency or disaster recovery plans for Year 2000 related network problems and the status of such plans. If such plans are still being developed, please report the expected completion date.

*Covad is currently developing a contingency plan and is anticipating a completion date of fall 1999.*

# ATTACHMENT A

# Covad Software - Strategy to Handle Y2K Compliance

## *What is the Year 2000 Problem?*

Covad's computer software is at risk of failure when the century changes to the year 2000. Most computer software creates, stores, and uses two-digit dates, (e.g., '1996' is represented as '96'). The use of two digits to represent the year will affect calculations, comparisons, and data sorting. For instance, dates are used to calculate a person's age or benefits eligibility. Data may not be stored correctly and distinguishing which century may not be obvious, (e.g., 1897, 1997, or 2097?). Hardware, such as personal computers or mainframes, have internal clocks which may not roll over to the year 2000.

Two-digit dates were introduced decades ago because of the high cost of computer storage space, and became a defacto standard in the industry. Unfortunately, with two-digit dates computers cannot distinguish between centuries. With two-digit dates, a computer stores '00' regardless of whether the date is 1900 or 2000. Therefore, when the century must be identified, computer hardware and software make assumptions about the century (and commonly assume '00' is '1900') and, computer functions that depend on dates may produce unpredictable results that range from equipment failures to ambiguous or incorrect data. All information flows and all business activities that depend on information flow are at risk if the Year 2000 problem is not corrected.

This document outlines Covad Communication Company's strategy to deal with this and ensure that it won't be a factor in future operations.

## *Strategy*

The strategy to deal with this problem manifests itself in terms of a process which will be followed (similar to the Quality Assurance Plan). There are 5 fundamental steps in this process:

1. Awareness/Communication
2. Inventory
3. Assessment
4. Project Plan for Conversion
5. Conversion

## *Awareness*

This is the process of ensuring that all development staff have been made aware of the problem and the steps that one should take to avoid introducing the problem in future development. It is also concerned with informing the users of the software applications pitfalls to watch out for and log as bugs, when they do run across the problem in any variation.

## Inventory

Taking inventory of all systems that are built in house as well as those systems that are purchased is an important step in the process of correction. For each system built in house, a questionnaire is to be filled out listing dependencies on external products. For each external products used the following information is required:

- Vendor name
- Contact Person: Name, Phone, Fax, Email
- Product being supplied by vendor
- Is this a product that will be present in the OSS's runtime? Or is it a product used only at development time?
- Is this certified to be Y2K compliant?
- If not, what are our options (upgrade, manual setting of some parameters etc.) ?
- Date/release by which vendor's product will be compliant.

## Assessment

Please see attached questionnaire that will be used to assess state of compliance of our software systems. The result of this phase will be to identify for each system whether the following applies:

- Retirement – get rid of the system, it's no longer required.
- Renovation – fix the system by going through a conversion process.
- Replacement – Build a new module/system to replace the defective one.
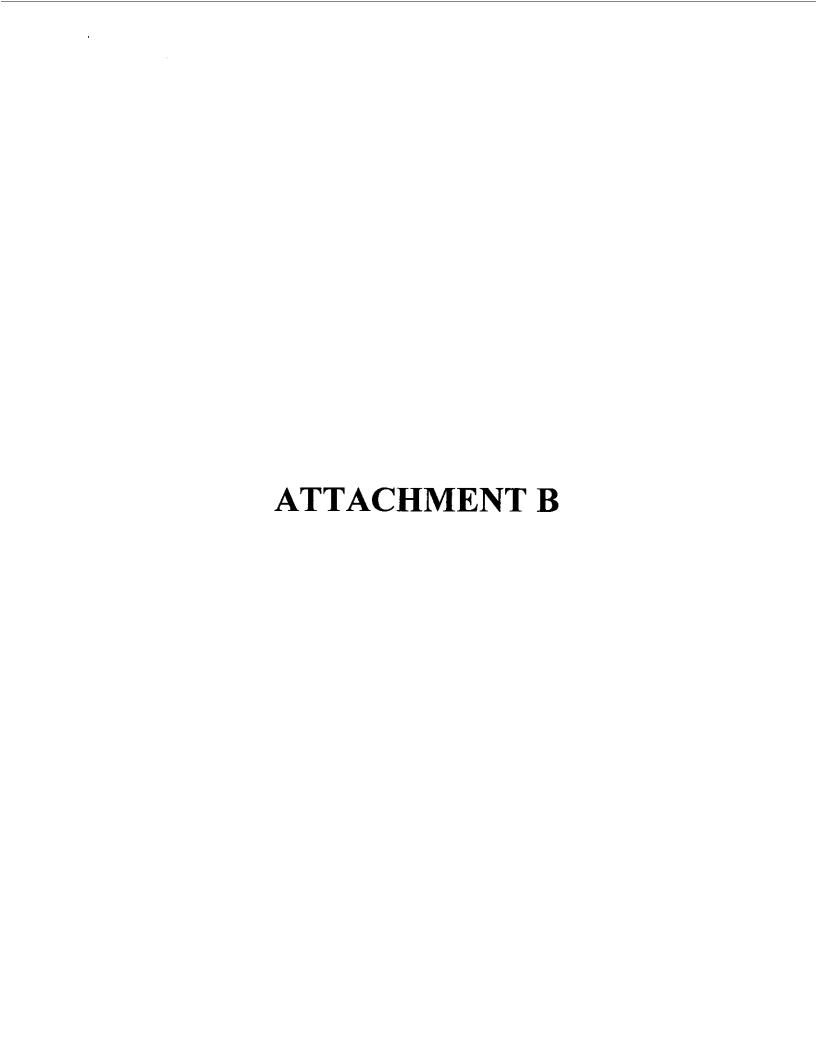- Not applicable (in other words, do nothing)

## Project Plan

In this phase, an actual plan is drawn up with resources needed for the conversion being identified. It will point out the milestones that the users/managers can expect to see with an eventual final compliance date.

## Conversion

In the last phase, the project plan drawn up during the previous phase is executed. The steps that this phase involves are:

- Design
- Coding changes
- Test Design
- Test Suite construction
- Running of all tests

# ATTACHMENT B

# Y2K - IT statements of Compliance: Check List

### Introduction
Many computer and telecommunications products have some kind of time or date oriented mechanism within their architecture. This mechanism may be designed as part of the product's hardware or internal software. Sometimes the year portion of the date is represented only by the last two digits instead of the entire four digits. Consequently, when January 1, 2000 arrives, some products - though not all - may see this change as a move backwards in time to the year 1900 instead of forward in time to the year 2000, and various problems may unfold as a result.

One module is intended to be Year 2000 Compliant if it satisfies the following definition: The product will accurately receive, process, and provide date data from, into, and between the twentieth and twenty-first centuries, including the years 1999 and 2000, and make leap year calculations, provided that all other products (whether hardware, software, or firmware) used in or in combination with the product properly exchange data with it.

Year 2000 Compliance requires five main factors to be satisfied with respect to date datatype processing:
1. Correctly handle date information before, during, and after 1st January 2000 accepting date input, providing date output and performing calculation on dates or portions of dates.
2. Function according to the documentation before, during and after 1st January 2000 without changes in operation resulting from the advent of the new century assuming correct configuration.
3. Where appropriate, respond to two-digit date input in a way that resolves the ambiguity as to century in a disclosed, defined and pre-determined manner.
4. Store and provide output of date information in ways that are unambiguous as to century.
5. Manage the leap year occurring in the year 2000, following the quad-centennial rule.

These criteria are a superset of the Year 2000 conformance requirements set out by the *British Standards Institute in DISC PD-2000-1 A Definition of Year 2000 Conformity Requirements.*

### Scope
Year 2000 Compliance has to be achieved at three system levels:
- Hardware
- System software, including databases, transaction processors and operating systems
- Application software, from third parties or developed in house

Only if Year 2000 conformance has been tested and validated at all three levels can a specific customer system be considered ready for the Year 2000.

The purpose of this document is to provide a check list of those modules, being them either software or hardware, whose vendors provided Y2K statement of compliance; such check list is intended to cover the Information Technology foot-print.

# Check List

## 1. Business Desktop Applications

| PC Desktop/ Laptops | Primary Functions | Vendor provided Y2K statement of compliance |
|---|---|---|
| Adobe Acrobat Reader | Document Viewer | YES |
| Eudora | Electronic Messaging | YES |
| Microsoft Access 97 | Database Management | YES |
| Microsoft Excel 97 | Spreadsheet Calculations | YES |
| Microsoft Internet Explorer 4.x | Internet Web Browser | YES |
| Microsoft Outlook 98 | Calendar Scheduling / Electronic Messaging | YES |
| Microsoft PowerPoint 97 | Overhead Presentations | YES |
| Microsoft Project 98 | Project Timelines | YES |
| Microsoft Word 97 | Word Processing | YES |
| Netscape Communicator 4.x | Internet Web Browser | YES |
| Norton Anti-Virus | Virus Protection | ? |
| Oracle Appletviewer 1.1.5 | GUI front end to Oracle Applications | YES |
| Oracle Developer 2000 | Development tool | YES |
| Oracle Discoverer | Run time product | YES |
| Oracle GLDI 3.1 | General ledger entry & uploads | ? |
| Remedy 3.2.1 | Trouble Ticketing | YES |
| Visio 4.0 Flow Chart | Drawing Flowcharting | YES |
| Windows NT Workstation 4.0 SP3 | Operating System | YES |
| Win Zip | File Compression | YES |

## 2. Databases

| Database | Primary Functions | Vendor provided Y2K statement of compliance |
|---|---|---|
| Oracle 7.3.x | Large scale database engine (supports most production applications) | YES |

| SQL Server 6.5 | Exchange, CMS, Remedy | YES |
|---|---|---|

## 3. Personal Computer

### 3.1 Desktop Configuration - Standard

| Description | Vendor provided Y2K statement of compliance |
|---|---|
| Compaq Desktop EP or Compaq Desktop Pro SB (Celeron 266MHz, 128MB, 2.1 Gig) | YES |
| Compaq Memory Upgrade | YES |
| 17" Monitor | YES |
| 3Com Ethernet Card | YES |

### 3.2 Desktop Configuration – High End

| Description | Vendor provided Y2K statement of compliance |
|---|---|
| Compaq Desktop EN (PentiumII 350MHz, 160MB, 6.4Gig) | YES |
| Compaq Memory Upgrade | YES |
| 17" Monitor | YES |
| 3Com Ethernet Card | YES |

### 3.3 Laptop Configuration – Standard (field use)

| Description | Vendor provided Y2K statement of compliance |
|---|---|
| IBM Think Pad 380D (Pentium 166MHz, 80MB, 2.1Gig) | YES |

| | Vendor provided Y2K statement of compliance |
|---|---|
| IBM ThinkPad 380D Memory Upgrade | YES |
| CMCIA Ethernet Card | YES |
| CMCIA Modem 56k | YES |
| Mouse + driver | YES |

## 3.4 Laptop Configuration – High End (Business Use)

| Description | Vendor provided Y2K statement of compliance |
|---|---|
| IBM Think Pad 600 (Pentium 233MHz, 140MB, 3.6Gig) | YES |
| IBM ThinkPad 600 Memory Upgrade | YES |
| CMCIA Ethernet Card | YES |
| CMCIA Modem 56k | YES |
| Internal CD-ROM | YES |
| Mouse + driver | YES |

## 3.5 Laptop Configuration Accessories

| Description | Vendor provided Y2K statement of compliance |
|---|---|
| Port Replicator | N/A |
| Keyboard | ? |
| 17" Monitor | ? |

## 4. Printers

| Printer Description | Vendor provided Y2K statement of compliance |
|---|---|
| HP Office Jet 720 (Printer/Fax/Scanner) | YES |
| HP Laser Jet 5000n | YES |
| HP Color Laser Jet 4500n | YES |

## 5. Servers

| Server | Description | Vendor provided Y2K statement of compliance |
|---|---|---|
| Dell | Power Server 6300 | YES |
| NT | Compaq Prosignia 200 | YES |
| NT | Compaq Prosignia 800 | YES |
| UNIX | Sun Ultra 1, 5, and 10 | YES |
| UNIX | Sun Enterprise 150, 250, 450 | YES |
| SOLARIS O.S. | SUN Unix Operating System | **-PARTIALLY-** **Patches need to be applied to our systems** |

## 6. Voice Systems

| Product | Primary Function | Vendor provided Y2K statement of compliance |
|---|---|---|
| Meridian Opt 81C | Headquarters PBX | YES |
| Meridian Opt 11C | Regional PBX | YES |
| Meridian Mail | Voice Mail | YES |

## 7. Network

### 7.1 Routers

| Product | Primary Function | Vendor provided Y2K statement of compliance |
|---|---|---|
| CISCO 2610 | Branch Office Routers | |
| CISCO 3640 | Non-ATM Core Router | |
| CISCO 4700 | ATM Capable Router | |

### 7.2 Ethernet Switches

| Product | Primary Function | Vendor provided Y2K statement of compliance |
|---|---|---|
| CISCO Catalyst 1924A (24 ports 10BT, 2 ports 100BT) | Standard desktop connection | |
| CISCO Catalyst 2924 | Switch to Switch or Server connection | |

## 8. Auxiliary Equipment

| Product | Primary Function | Vendor provided Y2K statement of compliance |
|---|---|---|
| Digital Link Prelude | TI CSU/DSU | |

## 9. OSS

| Product | Primary Function | Y2K |
|---|---|---|
| Falcon | Covad's OSS Software | Developed in house. Covad believes software is Year 2000 compliant. |