2. Sun 1/4–inch cartridge tape (QIC-24 format): 200 Dutch Guilders.

If you require DHL this is possible and will be billed through. Note that if you are not a member of EurOpen then there is an additional handling fee of 300 Dutch Guilders (please enclose a copy of your membership or contribution payment form when ordering). Do not send money, cheques, tapes or envelopes, you will be invoiced.

- PACIFIC RIM
  For mailings in the Pacific Rim, send a cheque for 300 dollars Australian to:

  Postal address: Isode Distribution
  (Attn: Andrew Waugh)
  723 Swanston St
  Carlton, VIC 3053
  Australia

  For information only:

  Telephone: +61 3 282 2615
  Fax: +61 3 282 2600
  Internet: `ajw@mel.dit.csiro.au`

  Specify one:

  1. 1600/3200/6250bpi 1/2-inch tape, or
  2. Sun 1/4-inch cartridge tape in either QIC-11, QIC-24 or QIC-150 format.
  3. Exabyte 2.3 Gigabyte or 5 Gigabyte format

  The tape will be written in *tar* format and returned with a documentation set. Do not send tapes or envelopes. Documentation only is the same price.

- Internet
  If you can FTP to the Internet, you can use anonymous FTP to the host `uu.psi.com [136.161.128.3]` to retrieve `isode-7.tar.Z` in BINARY mode from the `isode/` directory. This file is the *tar* image after being run through the compress program and is approximately 4.7MB in size.

- NIFTP
  If you run NIFTP over the public X.25 or over JANET, and are registered in the NRS at Salford, you can use NIFTP with username "guest" and your own name as password, to access `UK.AC.UCL.CS` to retrieve the file `<SRC>isode-7.tar.Z`. This file is the *tar* image after being run through the compress program and is approximately 4.7MB in size.

- FTAM on the JANET, IXI or PSS
  The source code is available by FTAM at the University College London over X.25 using

  JANET (DTE `00000511160013`)

  IXI (DTE `20433450420113`)

  PSS (DTE `23421920030013`)

  Use TSEL `259` (ASCII encoding). Use the "anon" user-identity and retrieve the file `isode-7.tar.Z` from the `src/` directory. This file is the *tar* image after being run through the compress program and is approximately 4.7MB in size.

  The file service is provided by the FTAM implementation in ISODE 6.0 or later (IS FTAM) and is registered in the pilot OSI Directory below

  ```
  bells, Computer Science, University College London, GB
  ```

For distributions via either FTAM or FTP, there are two additional files available for retrieval:

- `isode-7-doc.tar.Z`
  This is the LaTeXsource for the entire documentation set. It is a compressed *tar* image (3.5MB).

- `isode-7-ps.tar.Z`
  This contains the five volume manual in PostScript format. It is a compressed *tar* image (4.3MB).

Discussion Groups

The Internet discussion group `ISODE@NIC.DDN.MIL` is used as a forum to discuss ISODE. Contact the Internet mailbox `ISODE-Request@NIC.DDN.MIL` to be asked to be added to this list.

Support

Although the ISODE is not "supported" per se, it does have a problem reporting address, `Bug-ISODE@XTEL.CO.UK`. Bug reports (and fixes) are welcome by the way.

Commercial Support

A UK company has been set up to provide commercial support for the ISODE and associated packages — X-Tel Services Ltd. This company provides an update service, general assistance and site specific support. Although inclusion of this information should not be considered an endorsement, it should be noted that two of the primary ISODE developers now work at X-Tel Services Ltd.

Postal address:	X-Tel Services Ltd. University Park, Nottingham, NG7 2RD UK
Telephone	+44 602 412648
Fax	+44 602 790278
Internet	support@xtel.co.uk

If other organisations offering formal support for the ISODE wish to be included in future announcements, a suitable index will be organized.

Acknowledgements

Many people have made comments about and contributions to the ISODE which have been most helpful. The following list is by no means complete:

The first three releases of the ISODE were developed at the Northrop Research and Technology Center, and the first version of this manual is referenced as NRTC Technical Paper #702. The initial work was supported in part by Northrop's Independent Research and Development program.

The Wollongong Group supported ISODE for its 4.0 and 5.0 release. They deserve much credit for that. Furthermore, they contributed an implementation of RFC1085, a lightweight presentation protocol for TCP/IP-based internets.

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The *librosap*(3n) library was heavily influenced by an earlier native-TCP version written by George Michaelson, formerly of University College London, in the United Kingdom. Stephen E. Kille, of University College London,

[1] UNIX is a trademark of AT&T Bell Laboratories.

provided valuable feedback on the *pepy*(1) utility. In addition, both Steve and George provided us with some good comments concerning the *libpsap*(3) library. Steve is also the conceptual architect for the addressing scheme used in the software, and he modified the *librosap*(3n) library to support half-duplex mode when providing ECMA ROS service. George contributed the CAMTEC and ULTRIX[2] X.25 interfaces. Simon Walton, also of University College London, has been very helpful in providing constant feedback on the ISODE during beta-testing.

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John Pavel and Godfrey Cowin of the Department of Trade and Industry/ National Physical Laboratory in the United Kingdom both contributed significant comments during beta-testing. In particular, John gave us a lot of feedback on *pepy*(1) and on the early FTAM DIS implementation. John also contributed the SunLink X.25 interface.

Keith Ruttle of CAMTEC Electronics Limited in the United Kingdom

[2] ULTRIX is a trademark of Digital Equipment Corporation.

contributed both the driver for the new CAMTEC X.25 interface and the CAMTEC CONS interface (X.25 over 802 networks). This latter driver was later removed from the distribution for lack of use.

In addition, Andrew Worsley of the Department of Computer Science at the University of Melbourne in Australia pointed out several problems with the FTAM DIS implementation. He also developed a replacement for *pepy* and *posy* called *pepsy*. After moving to University College London, he improved this system and integrated into the ISODE.

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A previous release of the software contained an ISO TP4/CLNP package derived from a public-domain implementation developed by the National Institute of Standards and Technology (then called the National Bureau of Standards). The purpose of including the NIST package (and associated support) was to give an example of how one would interface the code to a "generic" TP4 implementation. As the software has now been interfaced to various native TP4 implementations, the NIST package is no longer present in the distribution.

John A. Scott of the MITRE Corporation contributed the SunLink OSI

[3]VMS is a trademark of Digital Equipment Corporation.

interface for TP4. He also wrote the FTAM/FTP gateway which the MITRE Corporation has generously donated to this package.

Philip B. Jelfs of the Wollongong Group upgraded the FTAM/FTP gateway to the "IS-level" (International Standard) FTAM.

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jpo & cjr

Nottingham, England
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Part I

Introduction