EDOC027

EUROGAM PROJECT

NSF DATA ACQUISITION SYSTEM

Tape Standards

Edition 1.0
January 1990

NSF Software Systems Group
UK Science and Engineering Research Council
Daresbury Laboratory

Tape Standards

V Pucknell

Edition 1.0
January 1990

1 Introduction

This document proposes standards for magnetic tapes intended to ensure exchangeability between laboratories and computer systems.

2 Devices

The following may be used:
(1) 1/2 inch tape drives recording at 6250 BPI.
(2) 8mm (Exabyte) tape drives - the density standard is yet to be decided.

3 Media

The following may be used:
(1) For 1/2 inch tape any media certified for GCR use at 6250 BPI is acceptable.
(2) For 8mm tape an INTERIM standard is Sony P5-90 tapes but a certified tape is to be announced by Sony soon and when available this should be used.

4 Labels

Tape Volume and header labels to either the IBM specified standard or the ANSI standard (as defined by ANSI X3.27 - 1978) should be used.

Only VOL1, HDR1, HDR2, EOF1 and EOF2 should be written by the Data Acquisition software. Other labels defined by the standards (such as UHLn and UTLn) should not be used.

5 Options

To enable tapes to be read easily by foreign systems the following only should be used:

(1) Volume name - The tape volume name should consist of 1 to 6 alphanumeric characters of which the first must be alphabetic.

(2) File name - File names should consist of 1 to 8 alphanumeric characters of which the first must be alphabetic.

Files on a tape should have unique names.

(3) File types - The following formats are permitted:

F format - ie fixed length records and blocks

VB format - variable length records (IBM)

D format - variable length records (ANSI)

(4) Block size - This should be less than 16K bytes for 1/2 inch tapes and less than or equal to 8K bytes (ie one track) for Exabyte tapes.

The format of data within a file on tape is the subject of other documents.