ISO/TR 17797:2014-10 (E)

Electronic archiving - Selection of digital storage media for long term preservation

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Methodology 1

5 Choice of storage system/media 2

6 Hard disk drive 3
6.1 General 3
6.2 Reasons for failure 3
6.3 Quality indicators 4
6.4 Technical arrangements 7
6.5 Control tools 8

7 Magnetic tape 9
7.1 General 9
7.2 Reasons for failure 9
7.3 Quality indicators 10
7.4 Technical arrangements 10
7.5 Control tools 11

8 Solidstatedrive(SDD),flashmemory 11
8.1 General 11
8.2 Reasons for failure 12
8.3 Quality indicators 12
8.4 Technical arrangements 12
8.5 Control tools 13

9 Optical discs (recordable and rewritable) 14
9.1 General 14
9.2 Reasons for failure 14
9.3 Quality indicators 14
9.4 Technical arrangements 15
9.5 Control tools 16

10 General requirements for long-term preservation 17
10.1 General 17
10.2 Media traceability 17
10.3 Optimal storage identification 17
10.4 Duplication of storage 17
10.5 Media stocktaking 17
10.6 Periodic inspection 18

11 Selection of media 18
11.1 General 18

11.2 Volume of information 18
11.3 Size of individual items 18
11.4 Retention period of the information 19
11.5 Capacity of the media 19
11.6 Technology already in use within the organization 19
11.7 Retrieval and accessibility requirements 19
11.8 Exposure to threats to media 20
11.9 Costs 20
11.10 Records management, regulatory, and discovery 20
11.11 Technology refresh cycle/software migration 20
11.12 Industry acceptance and maturity 20

Annex A (informative) RAID 21

Annex B (informative) SMART 23

Bibliography 24