ISO/IEC 14763-5:2025-05 (E)

Information technology - Implementation and operation of customer premises cabling - Part 5: Sustainability

Contents

Page

FOREWORD 5
INTRODUCTION 7
1 Scope 10
2 Normative references 10
3 Terms, definitions and abbreviated terms 10
3.1 Terms and definitions 10
3.2 Abbreviated terms 12
4 Conformance 12
5 Cabling design 12
5.1 Overview 12
5.1.1 General 12
5.1.2 Consideration criteria to sustainable cabling systems 13
5.2 Cabling design selection criteria 14
5.3 Considerations for renovation 14
5.4 Reduction of waste materials during the lifetime of the installation 15
5.5 Cabling infrastructure installation planning and practices 15
5.6 Impact of cabling infrastructure on energy requirements 15
5.7 Designing for quality to reduce rework 16
5.8 Balancing sustainability and other considerations 16
5.9 Recommended metrics to evaluate cabling sustainability 16
5.10 Creating sustainability mind-set among stakeholders 16
5.11 Economic aspects of sustainability 17
5.12 Transparency of documents for sustainable cabling system 17
6 Selection, packaging and transportation of components and related materials 17
6.1 General 17
6.2 Selection of components and related material 18
6.3 Packaging of components and related material 18
6.4 Transportation of components and related material 18
7 Installation, operation and maintenance 19
7.1 General 19
7.2 Process of installation, maintenance and operation 19
7.2.1 General 19
7.3 Installation practices 20
7.3.1 Recommendations for installation practices 20
7.3.2 Pre-installation step requirements 20
7.3.3 Installation step 20
7.3.4 Post-installation step 21
7.4 Operation 22
7.4.1 Requirements 22
7.4.2 Recommendations 22
7.5 Maintenance 23
7.5.1 Requirements 23
7.5.2 Recommendations 23
8 Management of waste materials 24
8.1 General 24
8.2 Cabling waste hierarchy 24

8.3 Waste electrical and electronic equipment 25
8.4 Waste assessment 25
8.5 Documentation 25
8.5.1 Waste management plan 25
8.5.2 Proof of assessment 26
8.5.3 Certificate of recycling 27
8.6 Waste storage and handling 27
8.6.1 Storage and handling 27
8.6.2 Risks 27
8.7 Waste actions 27
8.7.1 General 27
8.7.2 Reuse 28
8.7.3 Repurpose 28
8.7.4 Recycle 28
8.7.5 Dispose 29
9 Skill sets and training objectives 29
9.1 Overview 29
9.1.1 General 29
9.1.2 Needs of stakeholders 29
9.2 Work performance abilities, competencies and skill sets 30
9.3 Generic work performance ability requirements 30
9.3.1 General 30
9.3.2 Understanding of and contribution to SDGs 31
9.3.3 Collaboration with stakeholders 31
9.3.4 Education and training 31
9.4 Specialized work performance ability requirements 31
9.4.1 General 31
9.4.2 Understanding of requirements for sustainable cabling systems 32
9.4.3 Approaches for reduction of environmental footprints 32
9.4.4 Designing practices 32
9.4.5 Installation management and evaluation practice 32
9.4.6 Installation practice 33
9.4.7 Operation, management and maintenance of sustainable cabling systems 34
9.5 Best practices, education and training 35
9.5.1 Collection and publication of best practices 35
9.5.2 Sustainability specialist for sustainable cabling system and training 35
9.5.3 Criteria and means of evaluation 35
Annex A (informative) Example of skill sets for work performance 37
Annex B (informative) Example of syllabus 39
Bibliography 40

Figure 1 – Schematic representation of cabling standards in system lifecycle 8
Figure 2 – Schematic relationship between ISO/IEC 14763-5 and other relevant standards 9
Figure 3 – Process flow from design to disposal 19
Figure 4 – Cabling waste hierarchy 24
Figure 5 – Work performance ability requirements designated for stakeholders 30

Table 1 – Sustainability criteria 13
Table 2 – Aspects valued by stakeholders and satisfaction indexes 29